

# ***Service Manual***

ORDER NO.  
**CRT4073**

**CLASS D MONO AMPLIFIER**

# **PRS-D2000SPL<sub>/XS/UC</sub>** **PRS-D2000SPL<sub>/XSEW5</sub>**

**This service manual should be used together with the following manual(s) listed below.  
For the parts numbers, adjustments, etc. which are not shown in this manual,  
refer to the following manual(s).**

Model No.	Order No.	Mech. Module	Remarks
PRS-D2000SPL/XU/UC	CRT3934		

SAFTY INFORMATION

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.  
Health & Safety Code Section 25249.6 - Proposition 65

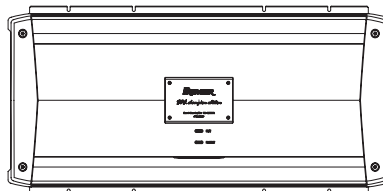
EXPLODED VIEWS AND PARTS LIST  
PACKING(Page 22)

PACKING SECTION PARTS LIST

Mark	No.	Description	PRS-D2000SPL/XU/UC	PRS-D2000SPL/XS/UC
	12	Unit Box	CHG6196	CHG6332
	13	Contain Box	CHL6196	CHL6332

Mark	No.	Description	PRS-D2000SPL/XUEW5	PRS-D2000SPL/XSEW5
	12	Unit Box	CHG6197	CHG6333
	13	Contain Box	CHL6197	CHL6333

# ***Service Manual***



PRS-D2000SPL/XU/UC

ORDER NO.  
**CRT3934**

**CLASS D MONO AMPLIFIER**

# **PRS-D2000SPL<sub>/XU/UC</sub>** **PRS-D2000SPL<sub>/XUEW5</sub>**



For details, refer to "Important check points for good servicing".

# SAFETY INFORMATION

## **CAUTION**

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

## **WARNING**

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.  
Health & Safety Code Section 25249.6 - Proposition 65



## [Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol. Please be sure to confirm and follow these procedures.

### 1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris. Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs. In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages. If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries. Please pay attention to your surroundings and repair safely.

### 2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification. Adjustments should be performed in accordance with the procedures/instructions described in this manual.

### 3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance. Make sure the proper amount is applied.

### 4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

### 5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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# 1. SERVICE PRECAUTIONS

## 1.1 SERVICE PRECAUTIONS

### ● Service Precaution



1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.
3. The area where the temperature gets high as a completely assembled product is the heat sink. As a unit, on the other hand, sub-heat sink and the periphery of the sub-heat sink are the areas where the temperature gets high.
4. There is a danger for electrical shock in the periphery of an area where "CAUTION High Voltage" is indicated on the printed circuit board due to a high voltage being generated during operation. Therefore, be careful when working around such areas.
5. The Holder Unit(CXC8183) cannot be used again when removing once. Please exchange it for new parts when you remove the Holder Unit from the product. Reattachment of the Holder Unit having once peeled off may possibly leak the light from an aperture generated by the weak adhesion of two-sided tape.
6. Since the secondary voltage is not discharged upon power-off of the product after the product operation check (some residual voltage is left even after five minutes), forcibly discharge the voltage or conduct servicing after checking the voltage with a tester.
7. When replacing the power FET or the output FET, parts connected in parallel need to be replaced at the same time.

## 1.2 NOTES ON SOLDERING

### NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.  
Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.
- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 °C.  
Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 °C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:

- Parts numbers of lead-free solder:  
GYP1006 1.0 in dia.  
GYP1007 0.6 in dia.  
GYP1008 0.3 in dia.

## 2. SPECIFICATIONS

### 2.1 SPECIFICATIONS

Power source .....	14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system .....	Negative type
Backup current .....	3 mA or less
Current consumption .....	67 A (at continuous power, 4 $\Omega$ )
Average current drawn* .....	18 A (4 $\Omega$ for one channel)
	38 A (2 $\Omega$ for one channel)
	55 A (1 $\Omega$ for one channel)

Fuse .....	40 A $\times$ 6
Dimensions .....	586 (W) $\times$ 65 (H) $\times$ 282 (D) mm
	[1 ft. 11 in. (W) $\times$ 2-1/2 in. (H) $\times$ 1-1/8 in. (D)]

Weight .....	9.1 kg (20 lbs.) (Leads for wiring not included)
Maximum power output .....	1 500 W $\times$ 1 (4 $\Omega$ ) / 3 000 W $\times$ 1 (2 $\Omega$ ) / 4 000 W $\times$ 1 (1 $\Omega$ )
Continuous power (14.4 V) .....	4 $\Omega$ , 20 Hz to 240 Hz, $\leq$ 1.0 % THD, 750 W $\times$ 1
	2 $\Omega$ , 50 Hz, $\leq$ 1.0 % THD, 1 500 W $\times$ 1
	1 $\Omega$ , 50 Hz, $\leq$ 1.0 % THD, 2 000 W $\times$ 1

Load impedance .....	4 $\Omega$ (1 $\Omega$ to 8 $\Omega$ allowable)
Frequency response .....	10 Hz to 240 Hz (+0 dB, -3 dB)
S/N ratio (UC model) .....	85 dB (IHF-A network)
(EW5 model) .....	85 dB (IEC-A network)
Distortion .....	0.3 % (10 W/4 $\Omega$ , 100 Hz)
Low pass filter .....	Cut off frequency: 40 Hz to 240 Hz

Subsonic filter (HPF) .....	Frequency: 20 Hz
	Slope: -24 dB/oct.

Bass boost .....	Frequency: 40 Hz to 120 Hz
	Level: 0 / 6 / 9 / 12 dB

Gain control .....	RCA: 400 mV to 6.5 V
Maximum input level / impedance .....	RCA: 6.5 V / 22 k $\Omega$

(UC model)

Power output .....	750 W RMS $\times$ 1 channel
	(at 4 $\Omega$ and $\leq$ 1% THD+N)
	1 500 W RMS $\times$ 1 channel
	(at 50 Hz, 2 $\Omega$ and $\leq$ 1% THD+N)
	2 000 W RMS $\times$ 1 channel
	(at 50 Hz, 1 $\Omega$ and $\leq$ 1% THD+N)
S/N ratio .....	60 dBA (reference: 1 W into 4 $\Omega$ )



#### Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

#### \*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

## 2.2 PANEL FACILITIES

**Terminal Cover**  
Before setting up the unit, unfasten the screws with a 4 mm hexagonal wrench and remove the terminal cover.

**MODE SELECT Switch**  
You can select amplifier's sync mode from MASTER, SYNC and SYNC INV. Set the MODE SELECT switch to the MASTER position when using one amplifier only. When using synchronously connecting two or more of these amplifiers in combination, set the first amplifier to MASTER, and set the remaining amplifiers to SYNC or SYNC INV according to the manner in which they are connected. The only time the amplifier is switched to the SYNC INV mode is when amplifiers are synchronously connected with the ex. bridge. When switching to the SYNC or SYNC INV mode, remove the screw and stopper. Remove the screw and stopper after checking that connections are correct.

**Bass Boost Frequency Control**  
You can select a bass boost frequency from 40 Hz to 120 Hz with the bass boost control.

**Bass Boost Level Control**  
You can select a bass boost level from 0, 6, 9 and 12 dB.

**Cut Off Frequency Control for LPF**  
You can select a cut off frequency from 40 Hz to 240 Hz.

**Subsonic Select Switch**  
The subsonic filter cuts inaudible frequencies below 20 Hz to eliminate unwanted vibrations and minimize power loss.

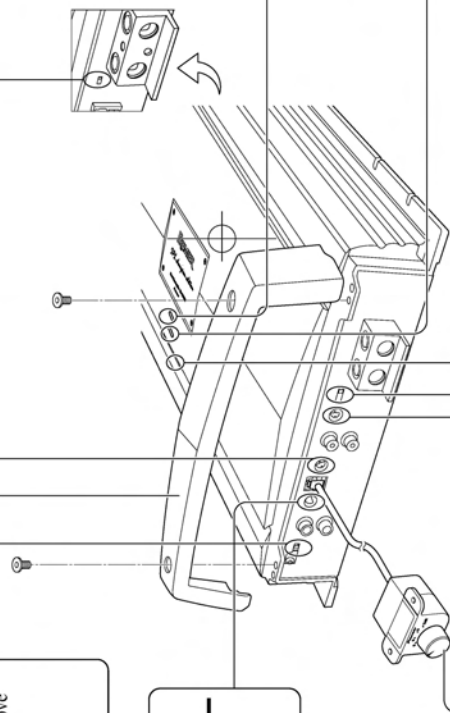
**Gain Control**  
If the sound level is too low, even when the volume of the car stereo used along with this power amplifier is turned up, turn gain control clockwise. If the sound distorts when the volume is turned up, turn the gain control counter-clockwise.  
• When using with an RCA equipped car stereo (standard output of 500 mV), set to the NORMAL position. When using with an RCA equipped Pioneer car stereo with max. output of 4 V or more, adjust level to match the car stereo output level.

**BFC (Beat Frequency Control) Switch**  
If you hear a beat while listening to an AM broadcast with your car stereo, change the BFC switch using a small standard tip screwdriver.

**HEAT Indicator (Yellow)**  
This indicates a problem with the amplifier.

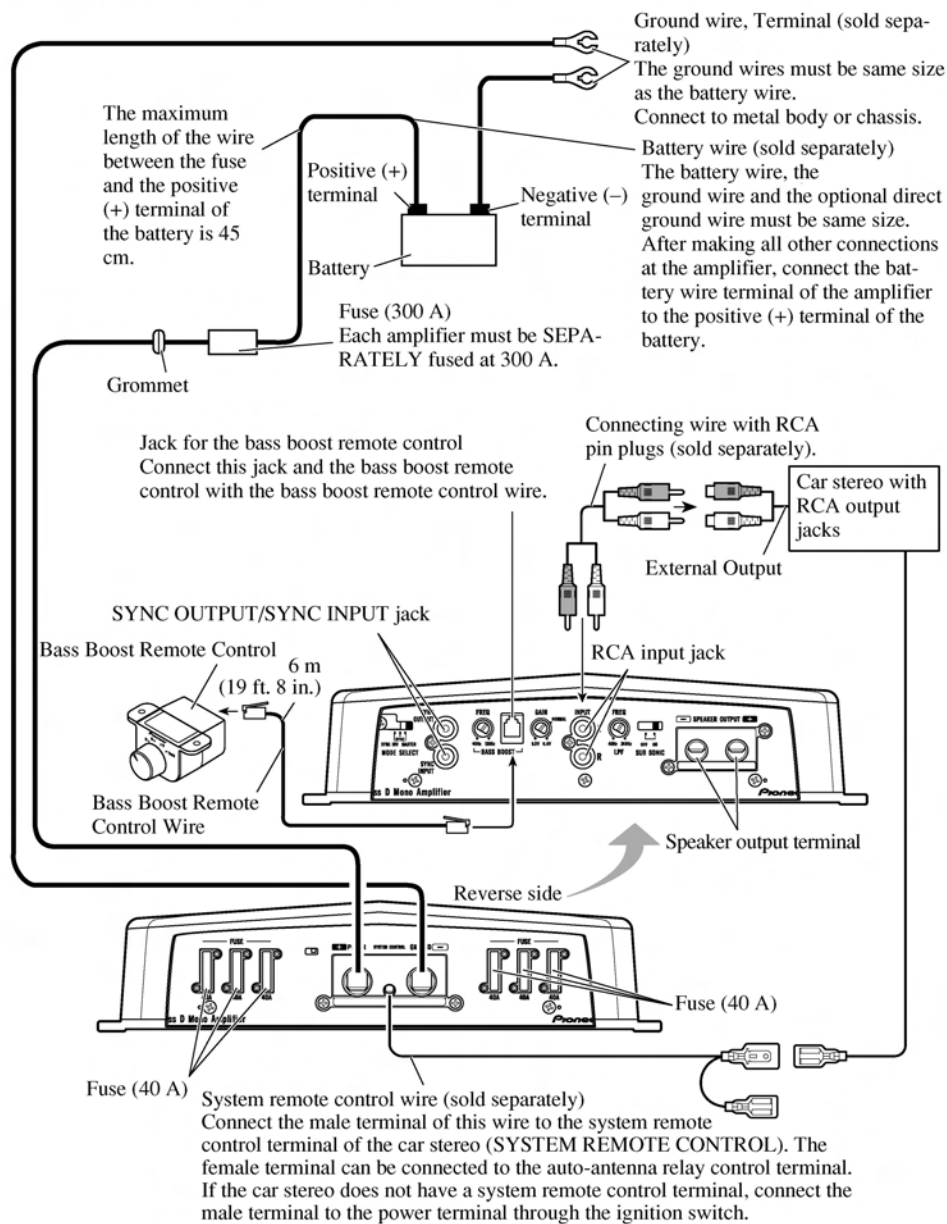
**PROTECT Indicator (Red)**  
This indicates a problem with the amplifier.

**Power Indicator (Blue)**  
The power indicator lights when the power is switched on.



## 2.3 CONNECTION DIAGRAM

- In the case of connecting the external output from a car stereo to an RCA input, use the jack used for full-range output. This is because the LPF of the amplifier cannot be turned OFF. If this jack cannot be used, connect the subwoofer output jack to the RCA input.



### 3. BASIC ITEMS FOR SERVICE

#### 3.1 CHECK POINTS AFTER SERVICING

To keep the product quality after servicing, please confirm following check points.

No.		Procedures	Item to be confirmed
1		Confirm whether the customer complain has been solved.	The customer complain must not be reappeared. Audio and operations must be normal.
2		Check the output sound.	Audio and operations must be normal.
3		Appearance check	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding video and audio:

Item to be checked regarding audio
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

3.2 JIGS LIST

● Lubricants and Glues list

A

Name	Jig No.	Remarks
Bond	GEM1017	Applying to Chemical Capacitor etc. (*)
Bond	GYL1006	Applying to Thermistor

(\*) You can use GEM1017 even if the color is defferent from the original ones.

B

C

D

E

F



A

B

C

D

E

F

12

1

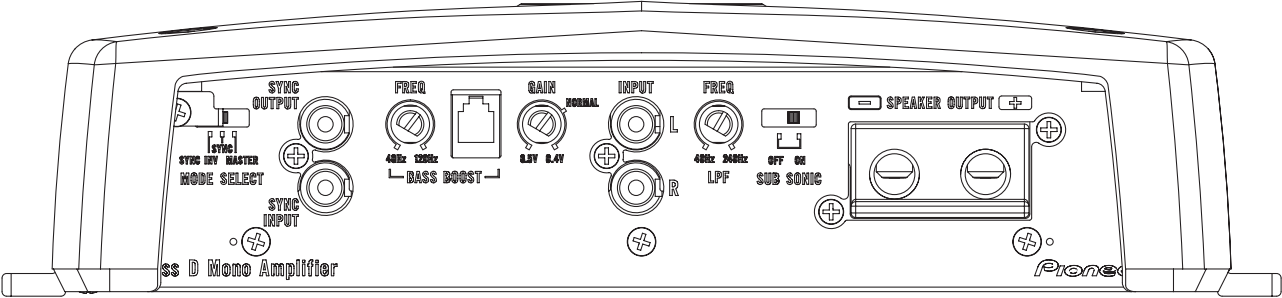
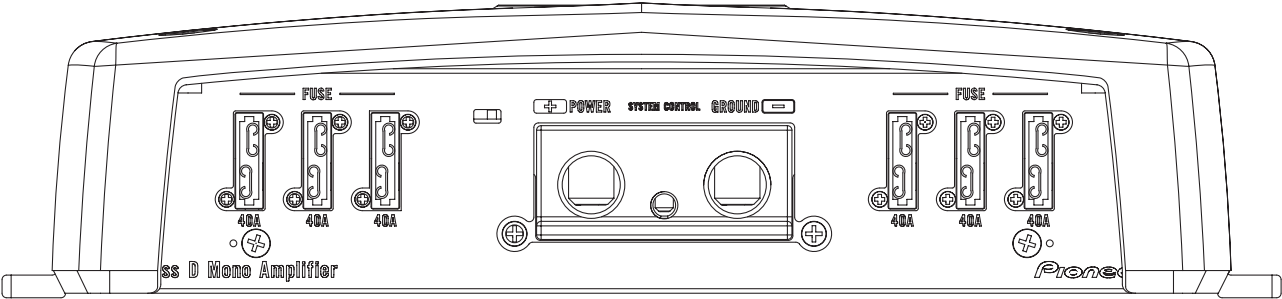
2

3

4

5. DIAGNOSIS

5.1 CONNECTOR FUNCTION DESCRIPTION



## 6. SERVICE MODE

There is no information to be shown in this chapter.

A

B

C

D

E

F

## 7. DISASSEMBLY

You can see the Screws List on the page 28.

### ● Removing the Case (Fig.1)

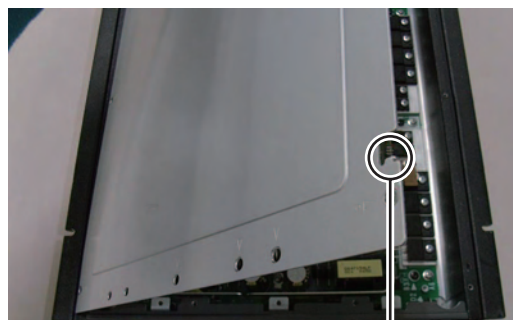
- ➡ **1** Remove the eight screws.
- ➡ **2** Remove the nine screws and then remove the Case.



Fig.1

Note)

When removing the case, remove it from the positioning side. Removal from the opposite side may deform the positioning pin. (Fig.2)



Positioning pin

Fig.2

Note)

This product has high voltage circuits inside, and the voltage will be kept for a while by big capacitors.

So, before starting disassembly(especially removing the Buss Bars(CND3947)), make sure if the voltage of +VH and -VH become low enough after turning off the power supply(+B & ACC).

If you want to discharge the capacitors faster, connect the resistors of same value in parallel with the original discharge resistors (R241 - R246).

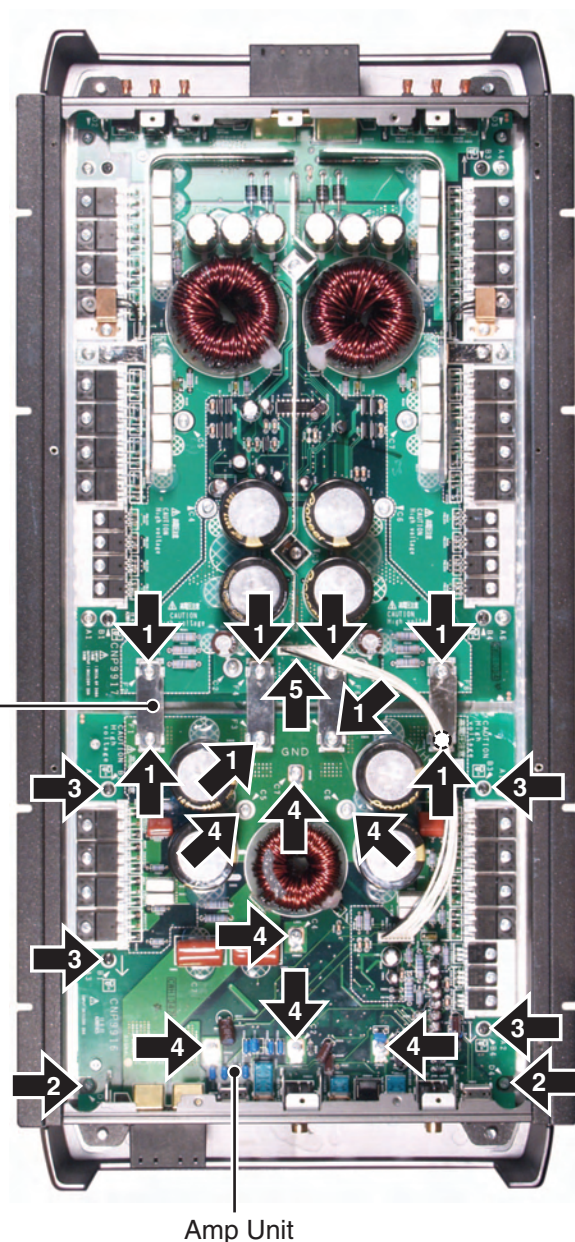
### ● Removing the Amp Unit (Fig.3)

- ➡ 1 Remove the eight screws and then remove the four Buss Bars.
- ➡ 2 Remove the two screws.
- ➡ 3 Remove the four screws.
- ➡ 4 Remove the seven screws.
- ➡ 5 Disconnect the Connector and then remove the Amp Unit.

Note)

Removal of substrate while the Buss Bar being connected will deform the Buss Bar, failing to set up again.

Buss Bar



Amp Unit

Fig.3

Note)

Remove a screw for MODE SELECT only when switching over the mode selection. You do not have to remove this screw when removing the unit board. (Fig.4)



Screw for MODE SELECT

Fig.4

## ● Removing the Power Supply Unit (Fig.5)

A

1

Remove the two screws.

2

Remove the two screws.

3

Remove the four screws.

4

Remove the eight screws and then remove the Power Supply Unit.

B

C

D

E

F

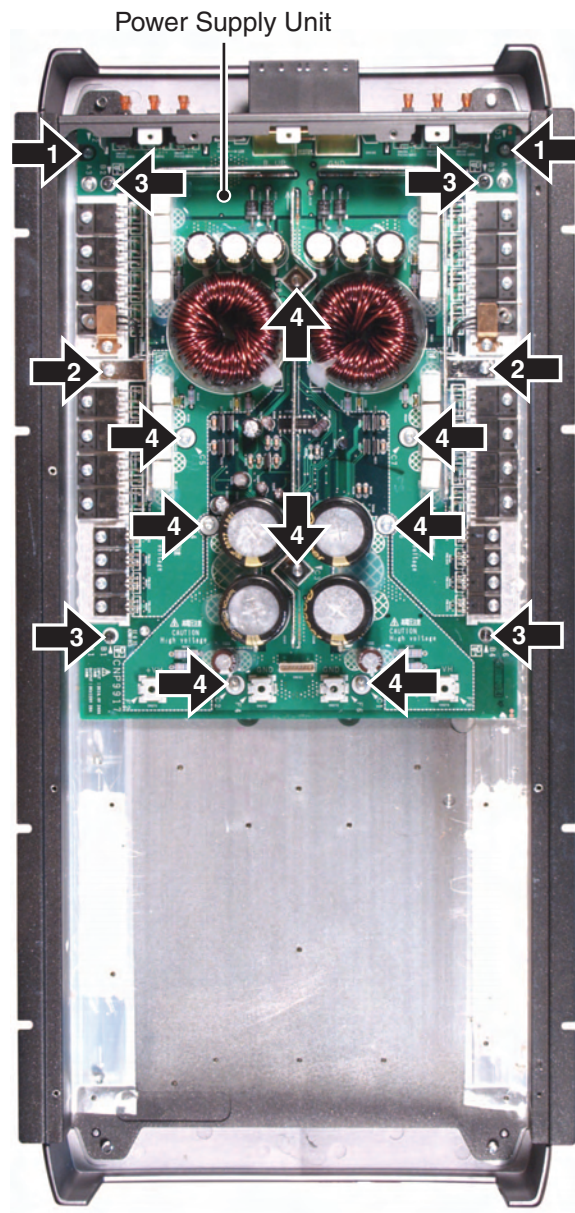
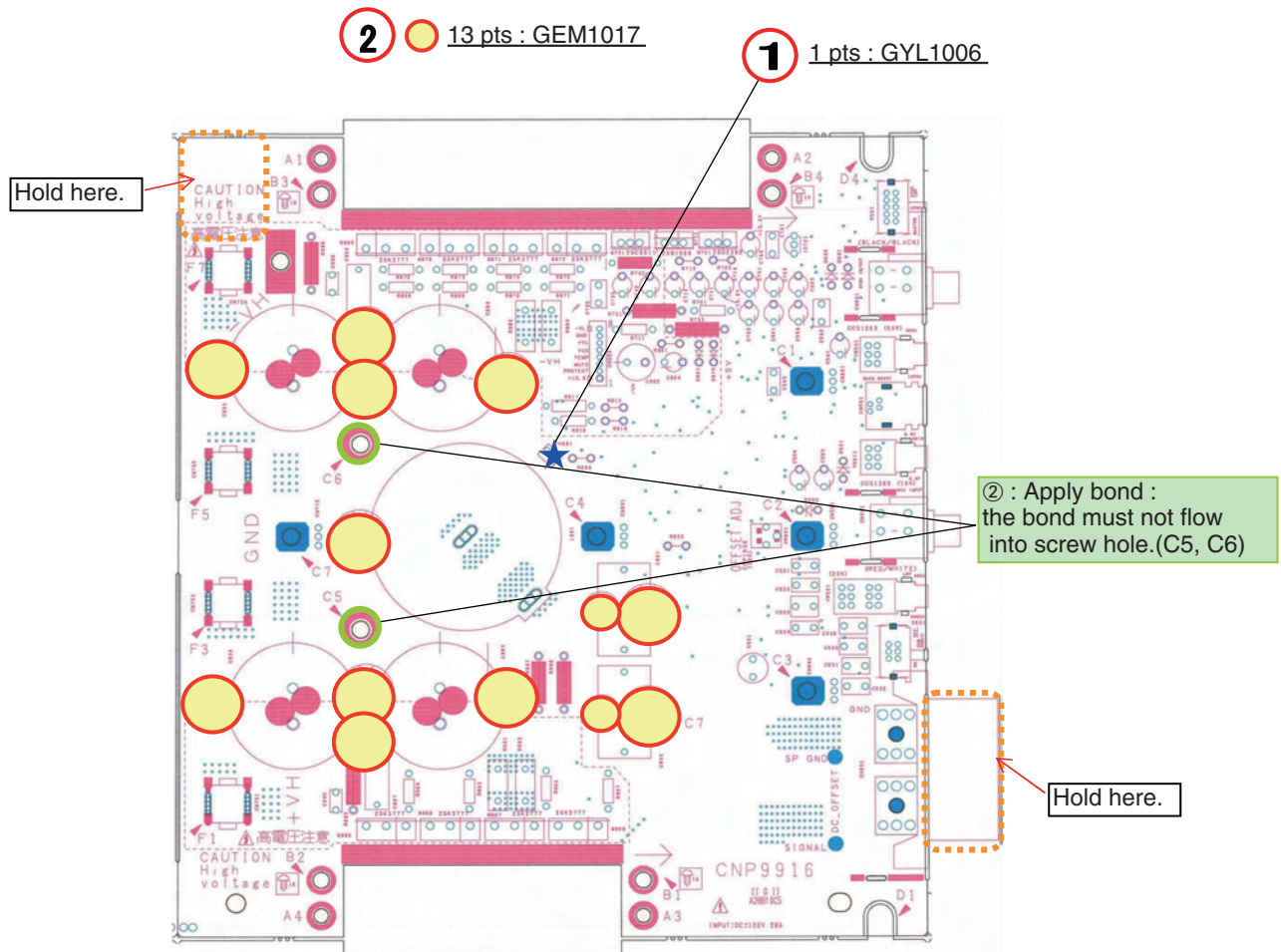


Fig.5





- Bonding Position
- Amp Unit



**1** ★ 1pts

Press the thermistor against the transformer and apply an adhesive as the end of the thermistor touches the transformer.



\* TACK-FREE TIME 5 minutes

**2** ● BOND LOCK 13pts

《Coil》

《Capacitor》



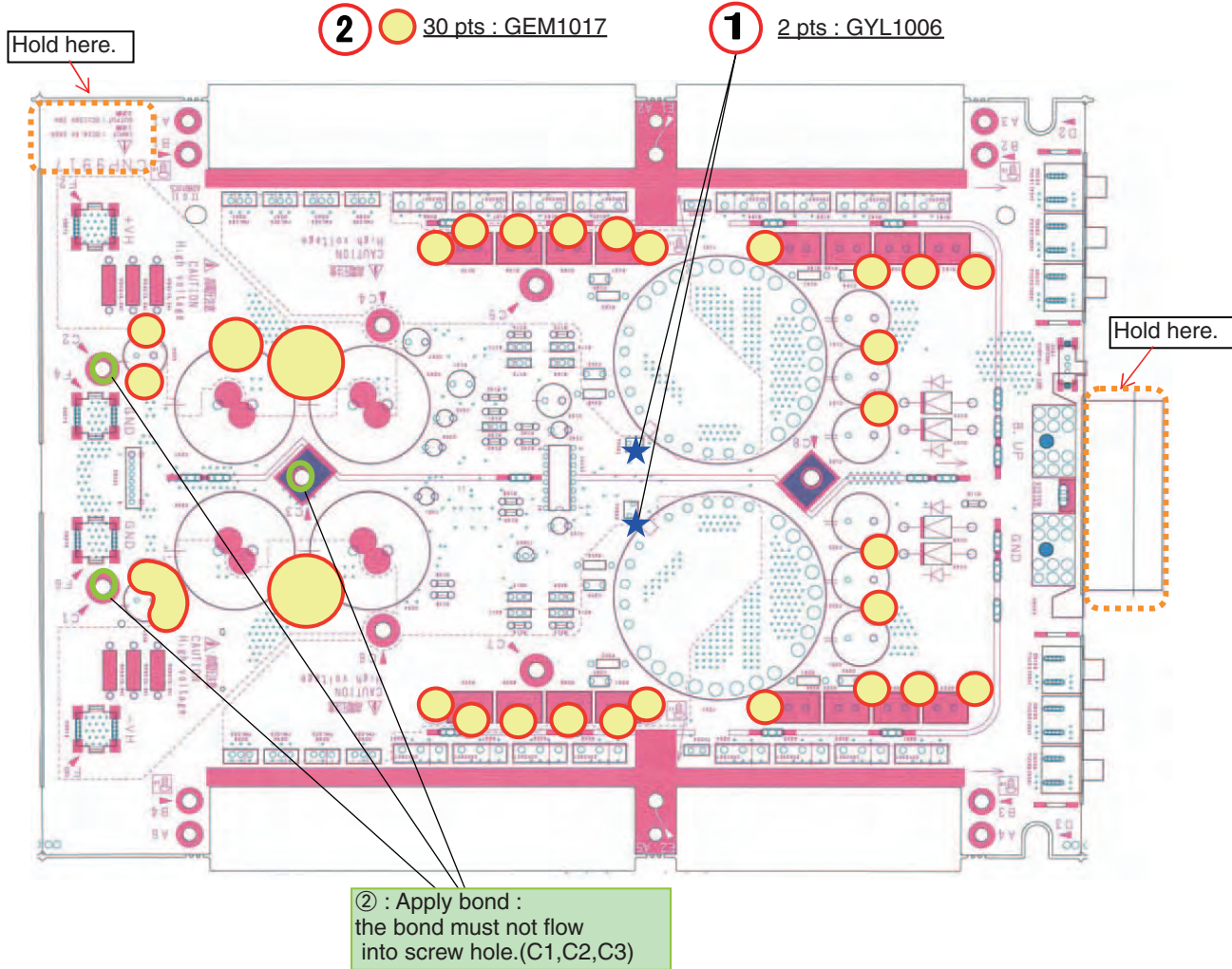
\*Bond should be applied both of parts and PCB.

\*Be aware not to apply bond on contact point of connector, seat area of screw.

\* TACK-FREE TIME 10 minutes

# ● Power Supply Unit

A



D

① ★ 2pts

Press the thermistor against the transformer and apply an adhesive as the end of the thermistor touches the transformer.



\* TACK-FREE TIME 5 minutes

E

②

● BOND LOCK 30 pts

《Capacitor》



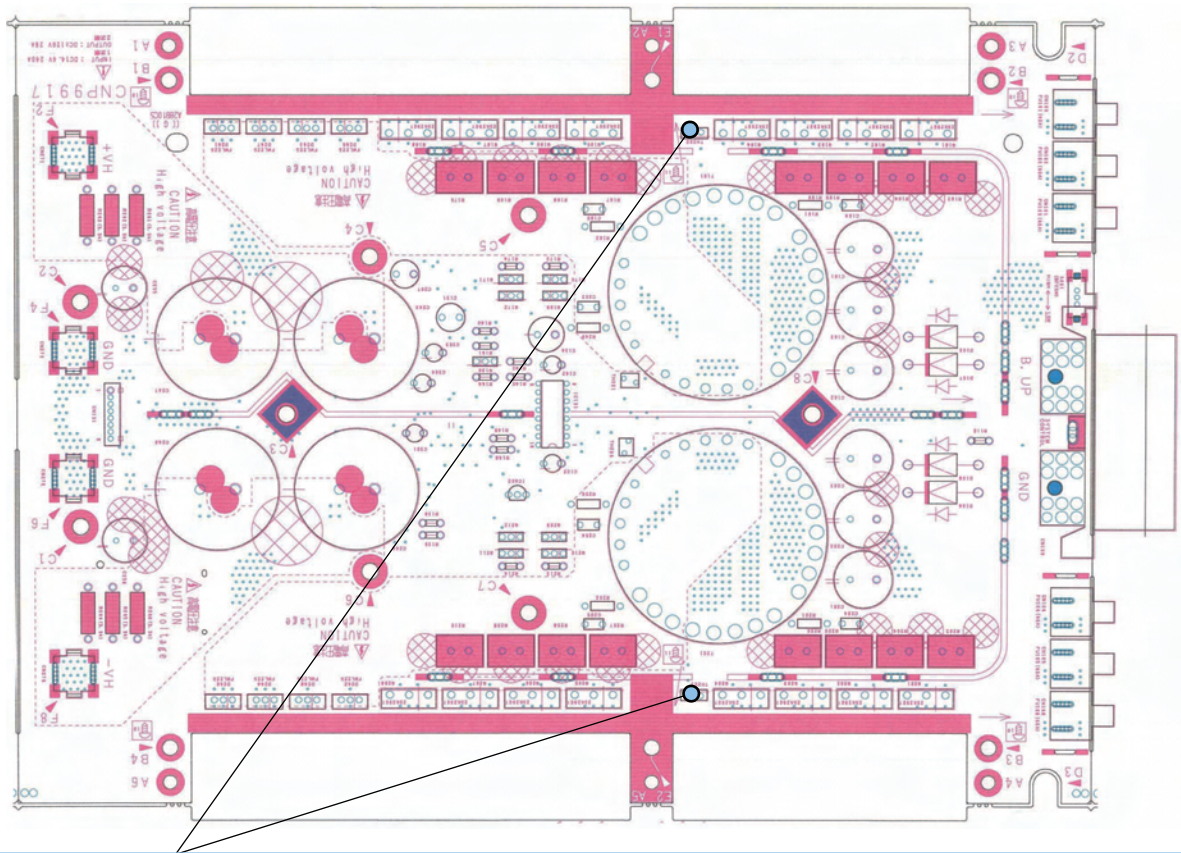
\*Bond should be applied both of parts and PCB.

\*Be aware not to apply bond on contact point of connector, seat area of screw.

\* TACK-FREE TIME 10 minutes

F

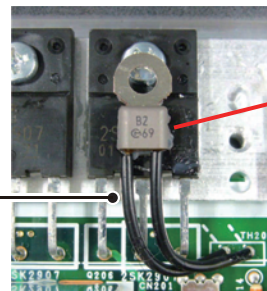




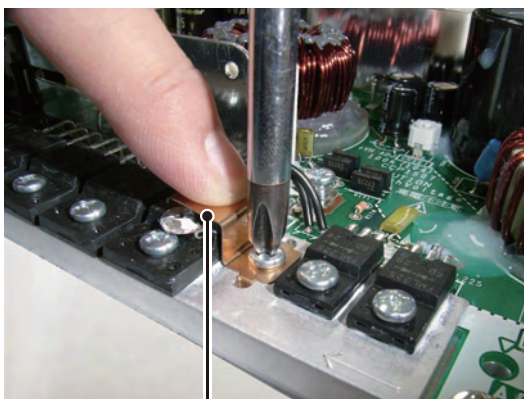
Ⓐ : Should be mounted closely.

Ⓐ : The styling of lead of TH, must be straight. (pay attention to a photograph.)

③ ● 2 pts : GYL1006

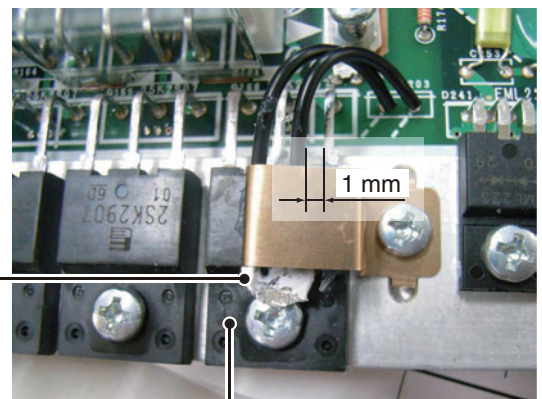


③ Apply bond to FET



Spring

When installing a Spring for holding of Thermistor, tighten a screw while pushing down the spring.



Thermistor

FET

Place a Thermistor at the center of FET such that the rightmost terminal of FET and the Thermistor terminal are separated by 1 mm or more.

1234

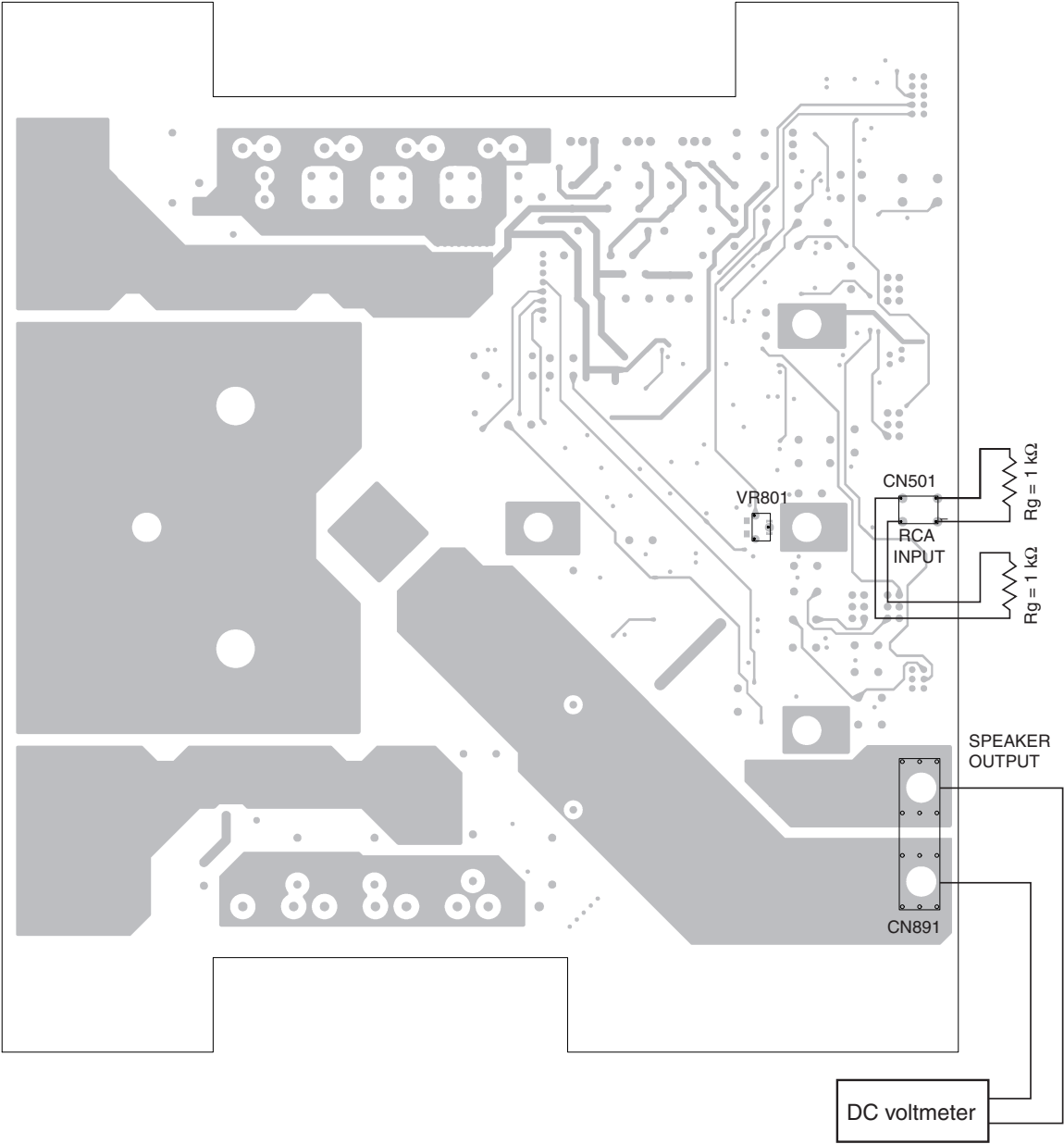
# 8. EACH SETTING AND ADJUSTMENT

## 8.1 ADJUSTMENT



### ● Connection Diagram

AMP UNIT (SIDE A)



### ● Speaker Output DC Offset Voltage Adjustment

No.	Measurement condition	Measurement point	Adjustment point	Adjustment Method
1	Power on 4 Ω, no input Rg = 1 kΩ	SP OUT	VR801	DC voltmeter : 0 ± 15 mV

■

5

■

6

■

7

■

8

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A

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B

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C

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D

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F

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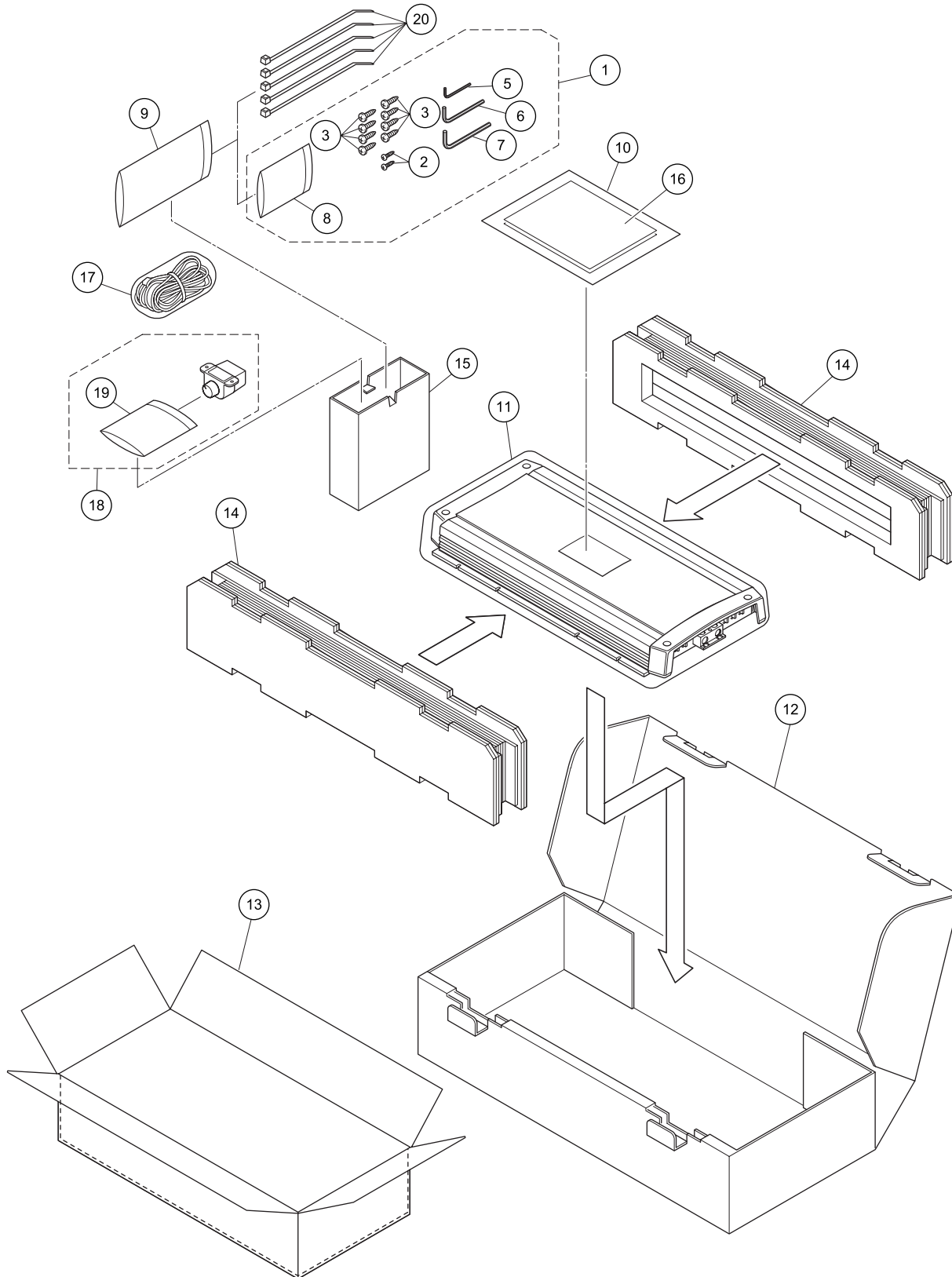
8

■

## 9. EXPLODED VIEWS AND PARTS LIST

- NOTES :
- Parts marked by " \* " are generally unavailable because they are not in our Master Spare Parts List.
  - The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - Screw adjacent to ▽ mark on the product are used for disassembly.
  - For the applying amount of lubricants or glue, follow the instructions in this manual.  
(In the case of no amount instructions, apply as you think it appropriate.)

### 9.1 PACKING



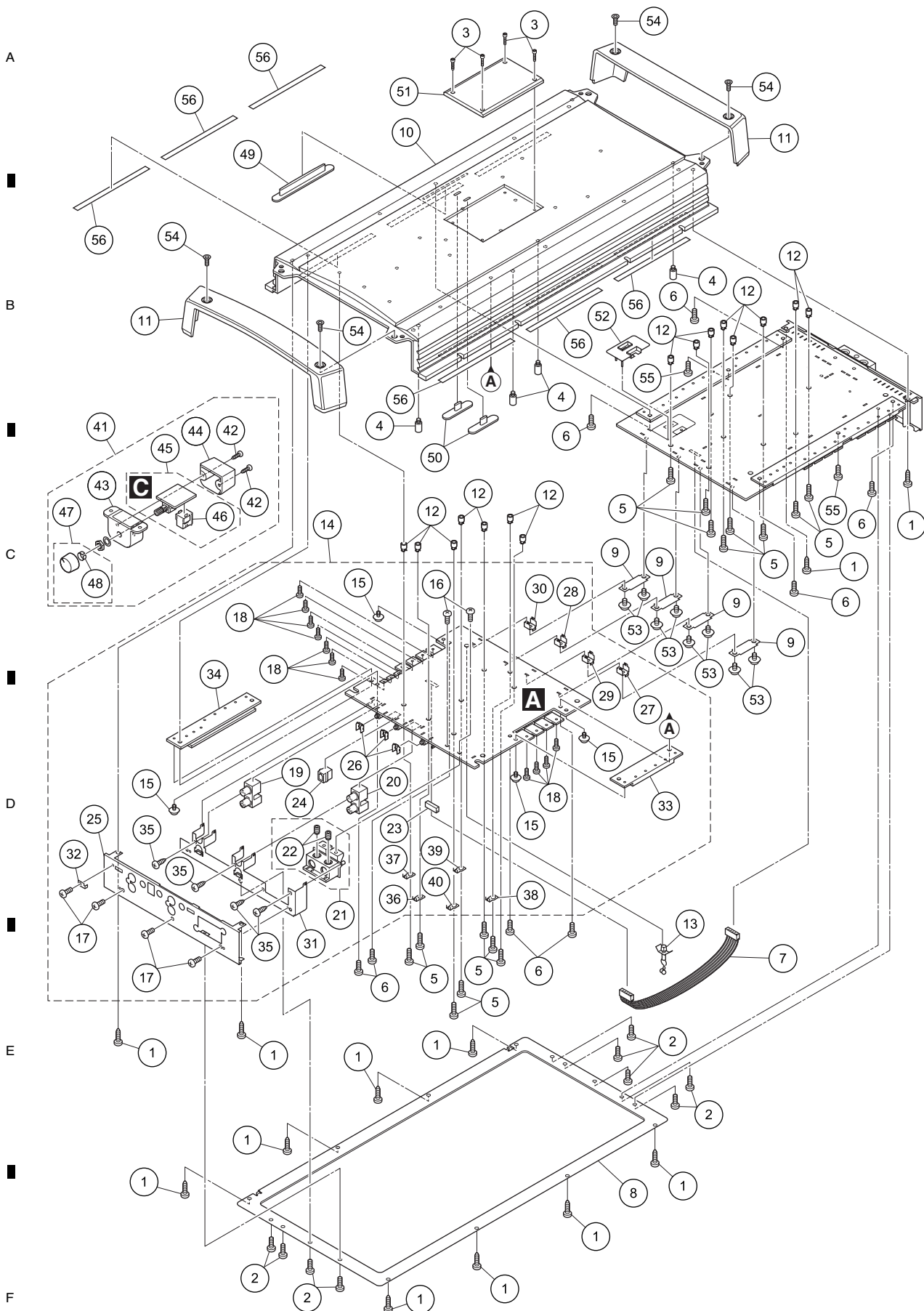
# PACKING SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Screw Assy	CEA7771	13	Contain Box(UC)	CHL6196
2	Screw	BYC30P100FTB		Contain Box(EW5)	CHL6197
3	Screw	BYC40P180FTB			
4	.....		14	Protector	CHP3367
5	Shaft	CLP1246	15	Protector	CHP3368
			16-1	Owner's Manual(UC)	CRD4225
6	Shaft	YLP5001		Owner's Manual(EW5)	CRD4224
7	Shaft	CLP1252	* 16-2	Warranty Card(UC)	CRY1070
* 8	Polyethylene Sheet	CNM4338			
* 9	Polyethylene Bag	CEG-158	*	Warranty Card(EW5)	CRY1157
10	Polyethylene Bag	CEG1116	17	Cord Assy	YDP5002
			18	Remote Control Assy	CXC4064
11	Cover	CEG1381	*	19 Polyethylene Bag	CEG1171
12	Unit Box(UC)	CHG6196	*	20 Lock Tie	CNV-754
	Unit Box(EW5)	CHG6197			

## Owner's Manual,Installation Manual

<b>Part No.</b>	<b>Language</b>
CRD4225	English, French, Spanish
CRD4224	English, Spanish, German, French, Italian, Dutch, Russian

## 9.2 EXTERIOR(1)





<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
1	Screw	BBZ30P060FTC	30	Holder(CN754)	CND3898	
2	Screw	BSZ30P060FTC				
3	Screw(M2.6 x 6)	CBA2115	31	Holder	CND3943	A
4	Screw(M3 x 5)	CBA1810	32	Holder	CND4097	
5	Screw(3 x 12)	CBA2012	33	Sub Heat Sink	CNR1901	
			34	Sub Heat Sink	CNR1902	
6	Screw(M3 x 10)	CBA2064	35	Screw	PPZ30P100FTB	
7	Cord Assy	CDE8431				
8	Case	CNB3376	36	Terminal(CN581)	VNF1084	
9	Buss Bar	CND3947	37	Terminal(CN681)	VNF1084	
10	Heat Sink	CNR1899	38	Terminal(CN705)	VNF1084	
			39	Terminal(CN881)	VNF1084	
11	Cover	CNR1915	40	Terminal(CN882)	VNF1084	B
12	Spacer	CNV8256				
13	Clamper	CNV9663	41	Remote Control Assy	CXC4064	
14	Amp Unit	CWH1347	42	Screw	BPZ20P100FTB	
15	Screw	AMZ30P040FTC	43	Grille	CNS8140	
			44	Cover	CNS8141	
16	Screw	BBZ30P060FSN	45	Remote Control Unit	CWM9848	
17	Screw	BSZ30P060FTB				
18	Screw(3 x 8)	CBA2011	46	Connector(CN1351)	CKS4962	
19	Pin Jack(CN601)	CKB1083	47	Knob Unit	CXC4335	
20	Pin Jack(CN501)	CKB1069	48	Spring	CBL1692	
			49	Lighting Conductor Unit	CXC8164	C
21	Terminal(CN891)	CKE1061	50	Lighting Conductor Unit	CXC8165	
22	Screw(M8 x 10)	CBA2059				
23	Plug(CN502)	CKS1041	51	Badge Unit(UC)	CXC8173	
24	Connector(CN561)	CKS4962		Badge Unit(EW5)	CXC8174	
25	Panel	CNB3374	52	Holder Unit	CXC8183	
			53	Screw	PMH40P060FTC	
26	Holder	CND2466	54	Screw(M6 x 10)	YBA5002	
27	Holder(CN751)	CND3898				
28	Holder(CN752)	CND3898	55	Screw	BBZ30P110FTC	
29	Holder(CN753)	CND3898	56	Spacer	CNN1954	D

The Holder Unit(CXC8183) cannot be used again when removing once.  
Please exchange it for new parts when you remove the Holder Unit from the product.  
Reattachment of the Holder Unit having once peeled off may possibly leak the light from an aperture generated by the weak adhesion of two-sided tape.

9.3 EXTERIOR(2)

A

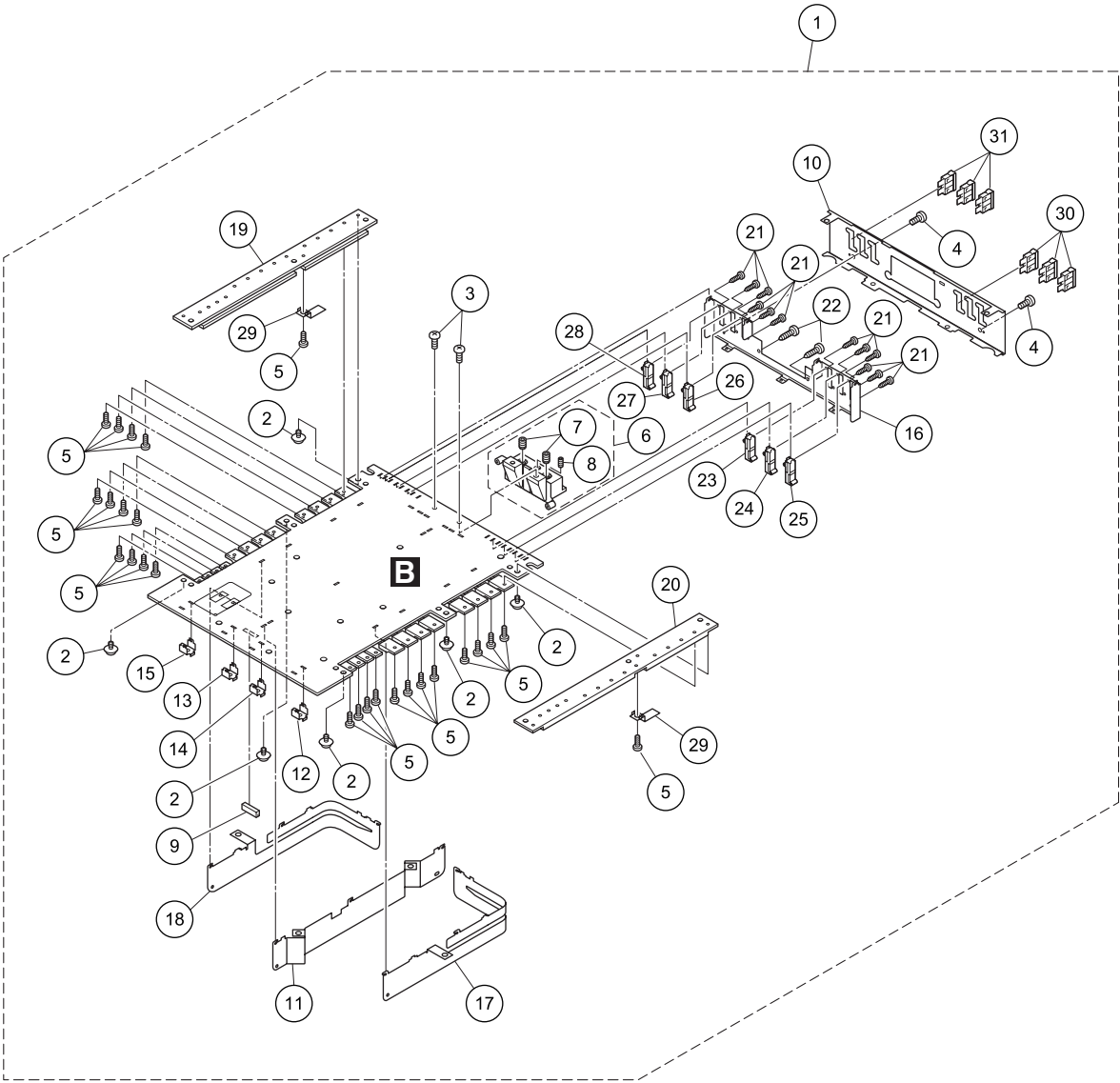
B

C

D



E

F





# EXTERIOR(2) SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
1	Power Supply Unit	CWR1084	
2	Screw	AMZ30P040FTC	A
3	Screw	BBZ30P060FSN	
4	Screw	BSZ30P060FTB	
5	Screw(3 x 8)	CBA2011	
6	Terminal(CN108)	CKE1063	
7	Screw(M12 x 14)	CBA2058	
8	Screw(M4 x 14)	CBA2060	
9	Plug(CN131)	CKS1041	
10	Panel	CNB3375	
11	Buss Bar	CND3820	B
12	Holder(CN271)	CND3898	
13	Holder(CN272)	CND3898	
14	Holder(CN273)	CND3898	
15	Holder(CN274)	CND3898	
16	Holder	CND3923	
17	Buss Bar	CND3926	
18	Buss Bar	CND3927	
19	Sub Heat Sink	CNR1900	
20	Sub Heat Sink	CNR1917	C
21	Screw	PPZ20P060FTB	
22	Screw	PPZ30P100FTB	
23	Fuse Holder(CN101)	YKR5001	
24	Fuse Holder(CN102)	YKR5001	
25	Fuse Holder(CN103)	YKR5001	
26	Fuse Holder(CN104)	YKR5001.	
27	Fuse Holder(CN105)	YKR5001	
28	Fuse Holder(CN106)	YKR5001	
29	Spring	CBL1776	
 30	Fuse(40 A) (FU101, 102, 103)	CEK1332	D
 31	Fuse(40 A) (FU104, 105, 106)	CEK1332	

# Screws List

A

Mark A on PCB  
AMF30P040FTC  
(3 x 4 Washer Faced Screw)



Mark B on PCB  
BBZ30P100FTB(3 x 10)



Mark C on PCB  
CBA2012(3 x 12)



B

Mark D on PCB  
BBZ30P060FTC(3 x 6)



Mark E on PCB  
BBZ30P110FTC(3 x 11)



Mark F on PCB  
PMH40P060FTC  
(4 x 6 with Spring Washer)



C

Case and Heat Sink  
BBZ30P060FTC(3 x 6)



Case, Panel and Holder  
BSZ30P060FTC(3 x 6)

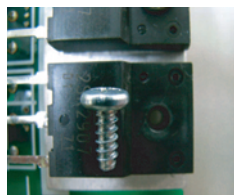


Holder and Panel  
BBZ30P060FTB(3 x 6)



D

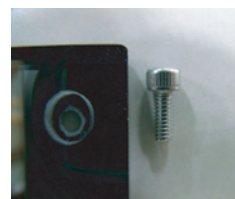
FET  
CBA2011(3 x 8 Tapping Screw)



Thermistor, Transistor  
CBA2011(3 x 8 Tapping Screw)



Badge  
CBA2115(M2.6 x 6)



E

Terminal Cover  
YBA5002(M6 x 10 Flat-head Screw)



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A

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B

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C

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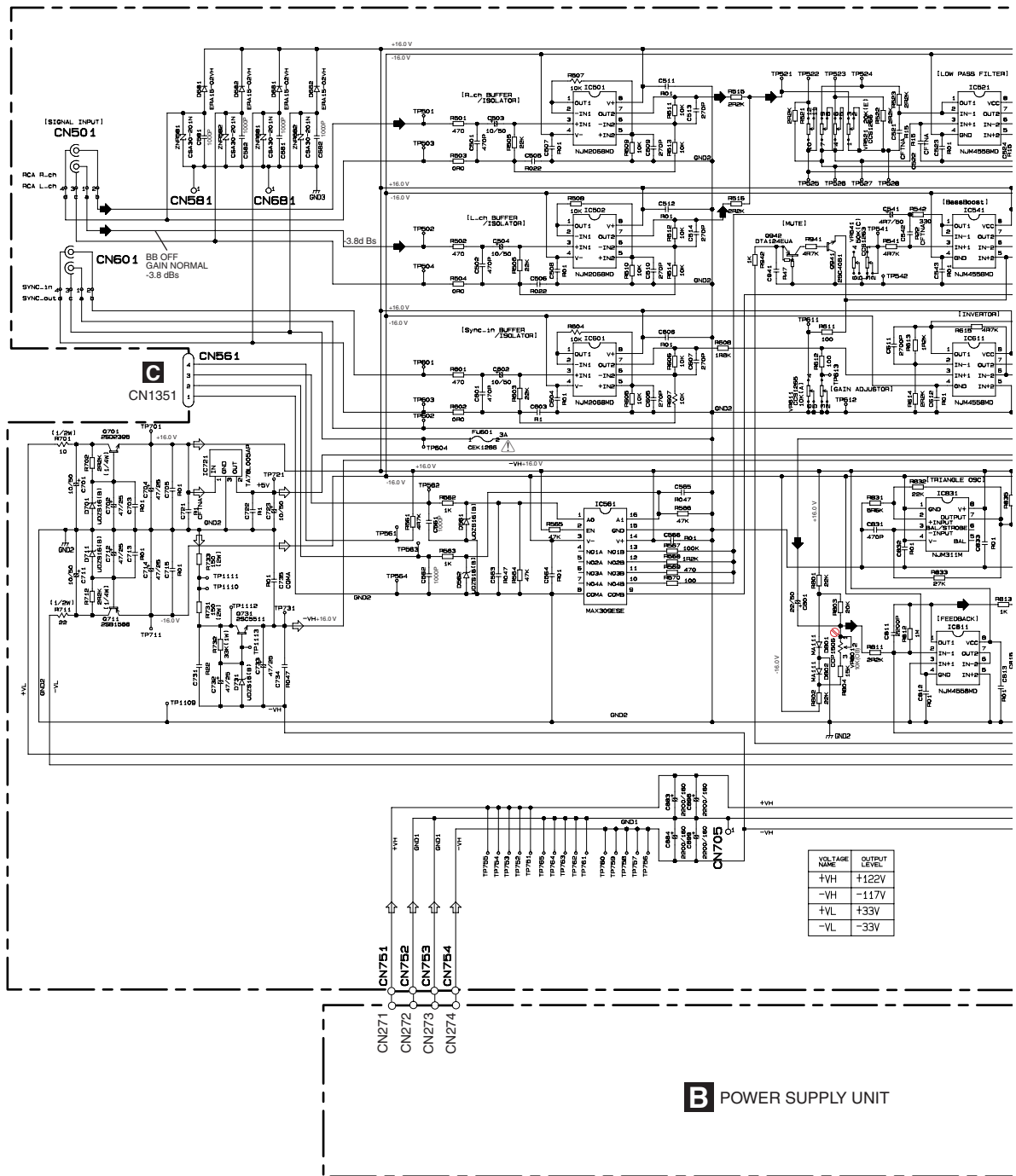
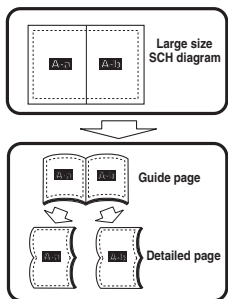
8

■

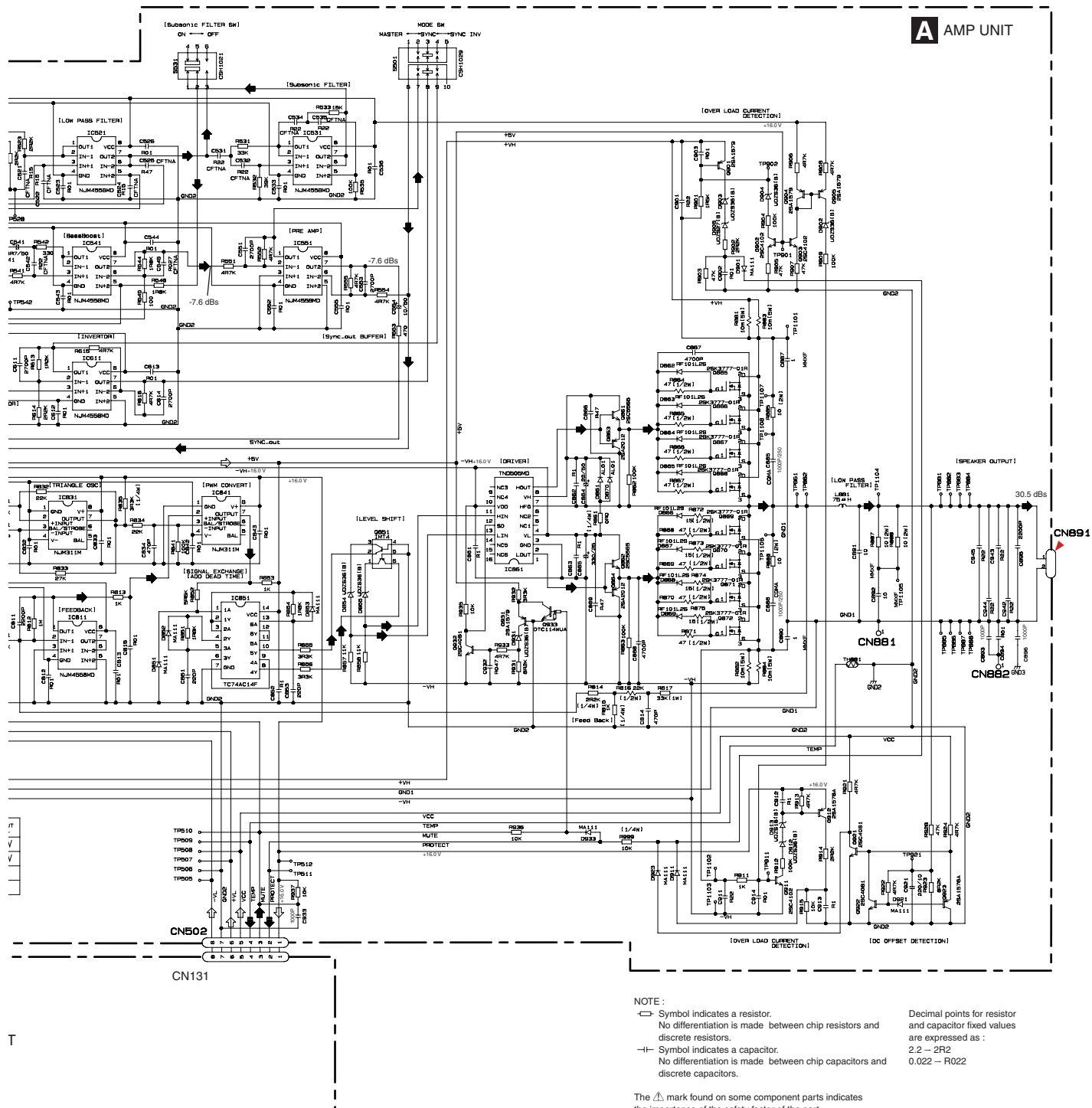
## 10.1 AMP UNIT(GUIDE PAGE)

**Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".**

**A-a**

**B** POWER SUPPLY UNIT

A

**A-b**

**NOTE :**

- ⎓ Symbol indicates a resistor.  
No differentiation is made between chip resistors and discrete resistors.
- ⎓ Symbol indicates a capacitor.  
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :

2.2 – 2R2  
0.022 – R022

The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A

B

C

D

E

F

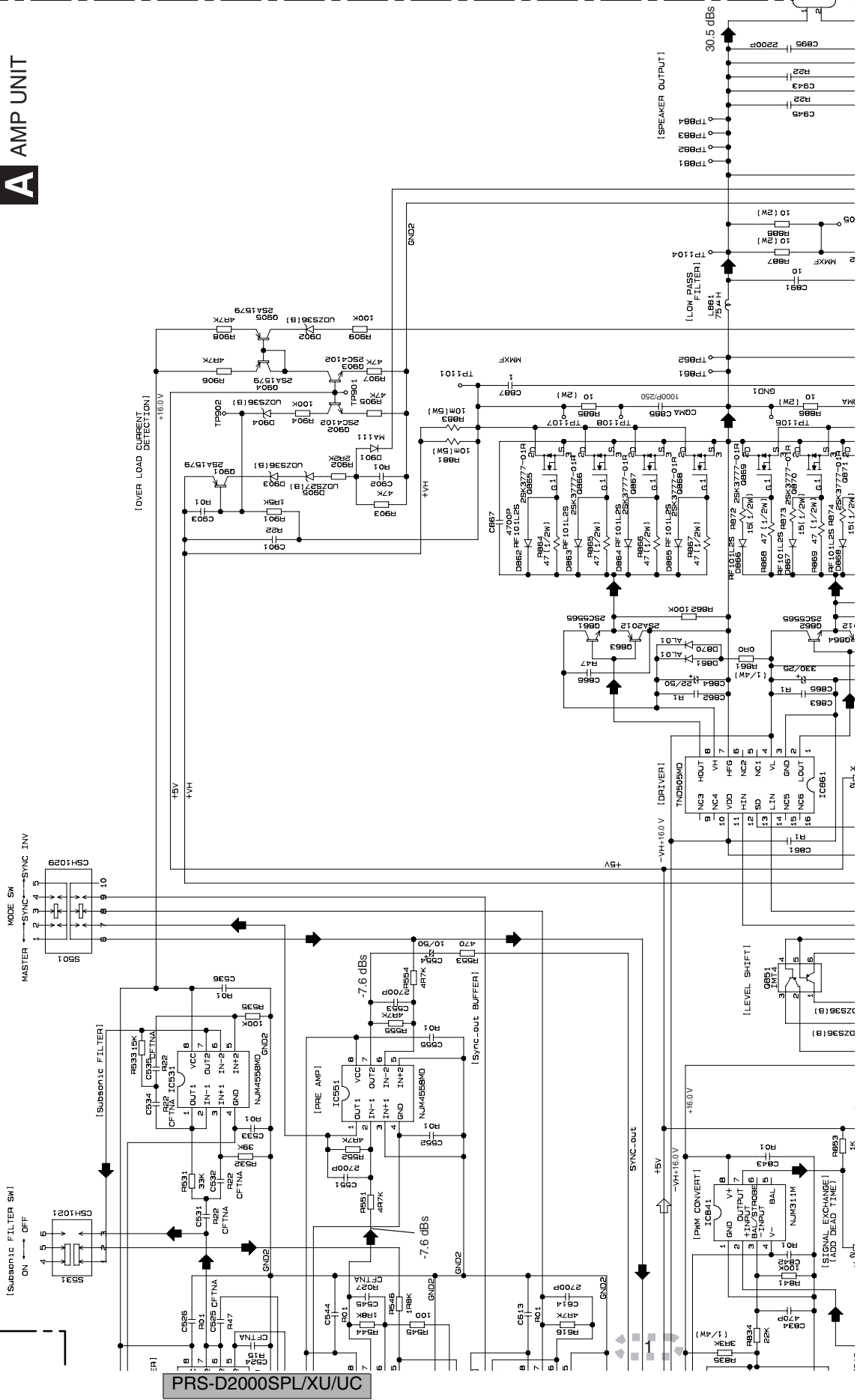
A-a A-b

A-b

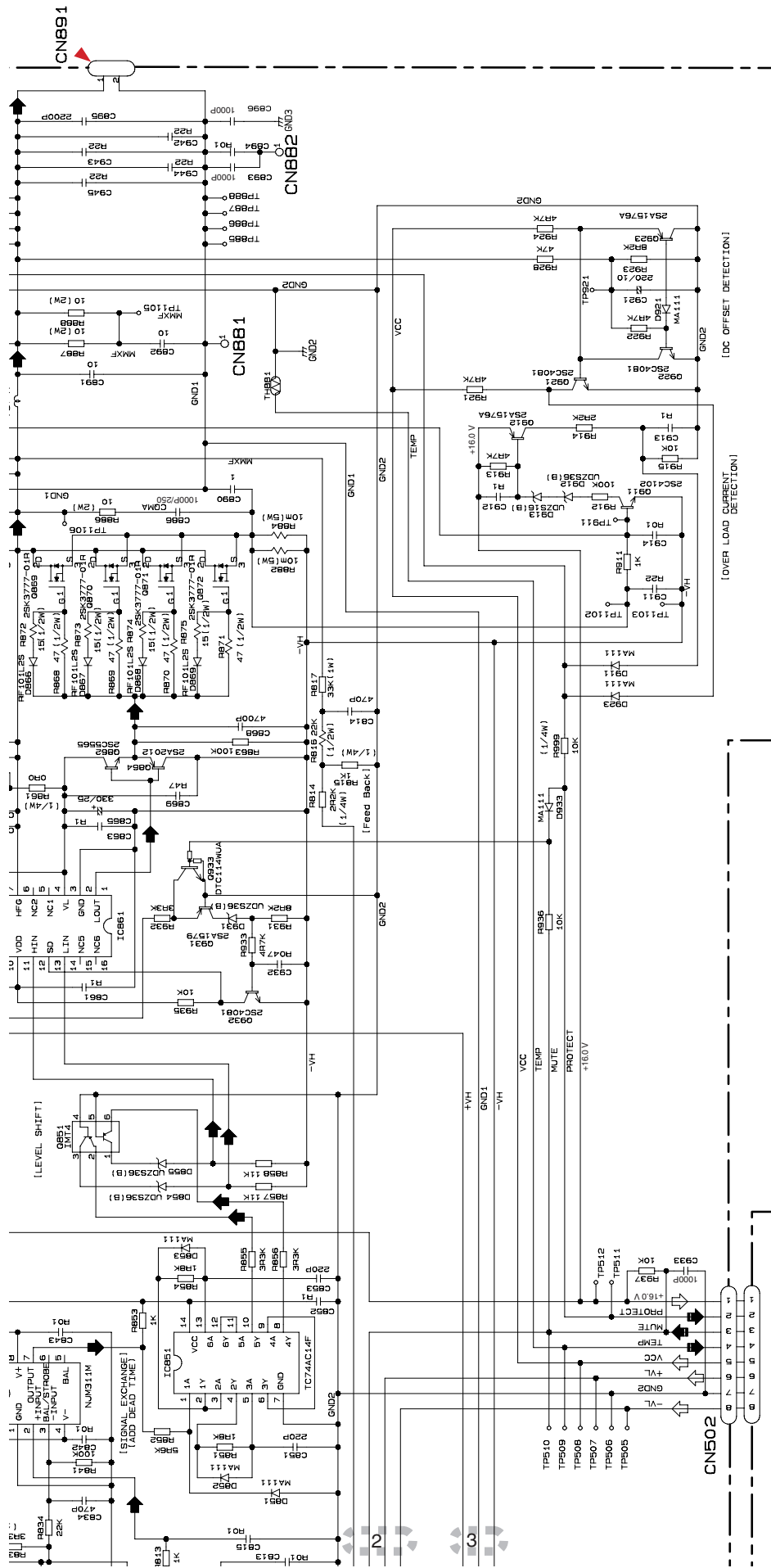
# A AMP UNIT

MODE SW  
1 2 3 4 5 6 7 8 9 10  
MASTER SYNC SYNC INV

[Subsonic Filter Sw]  
ON OFF



PRS-D2000SPL/XU/UC



# NOTE :

- Symbol indicates a resistor.  
No differentiation is made between chip resistors and discrete resistors.
- |— Symbol indicates a capacitor.  
No differentiation is made between chip capacitors and discrete capacitors.

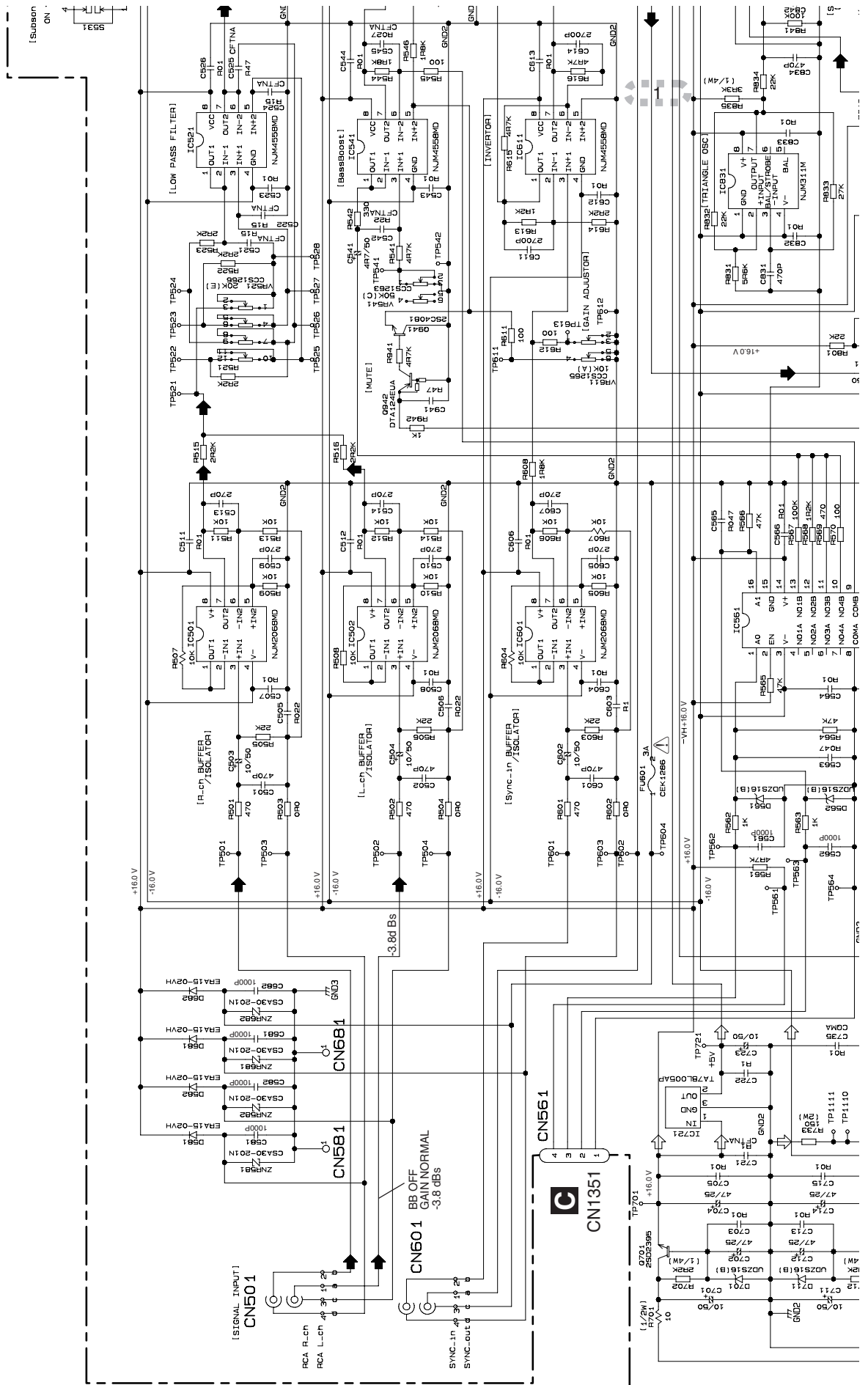
The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A-a	A-b
-----	-----

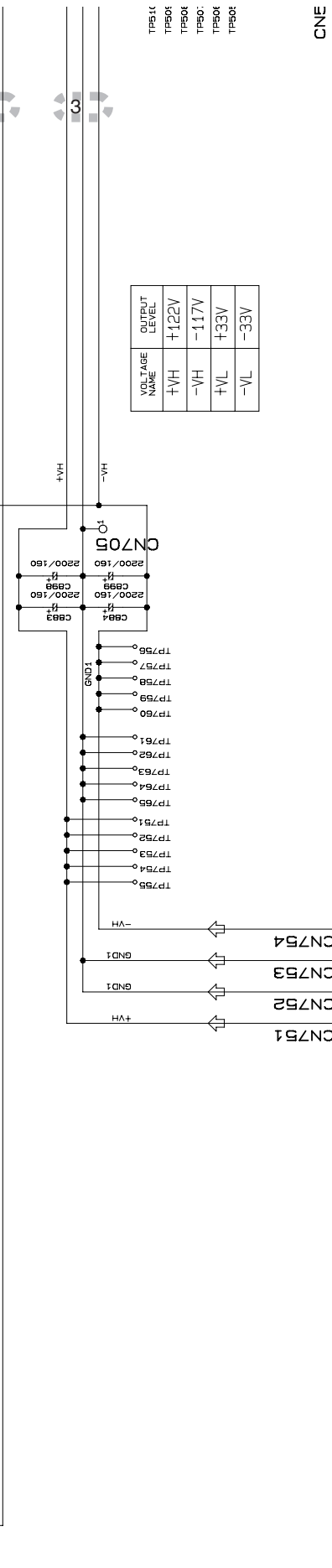
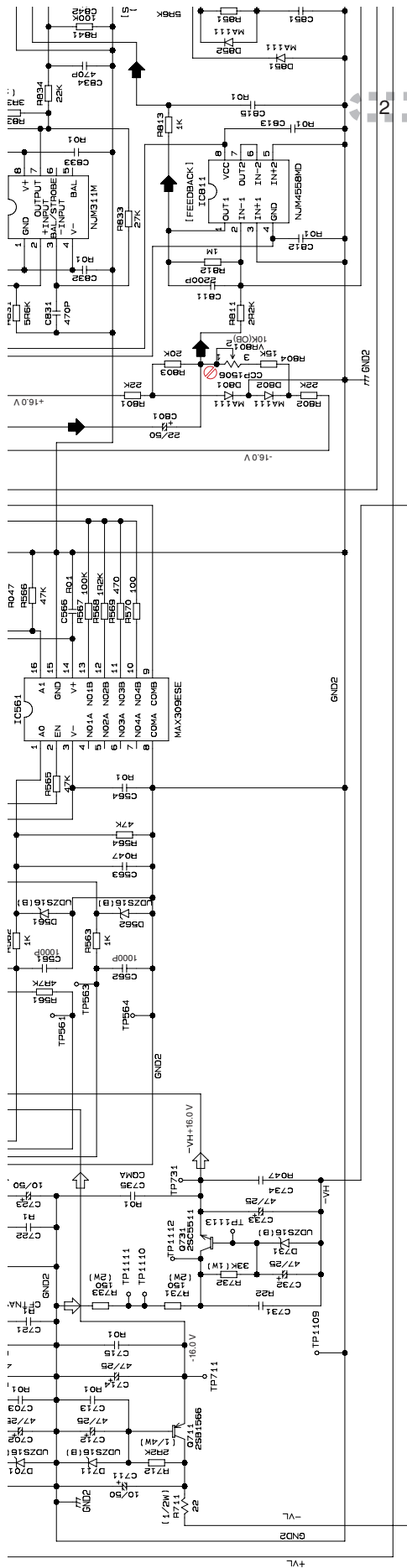
F

A-a A-b

**A-a**

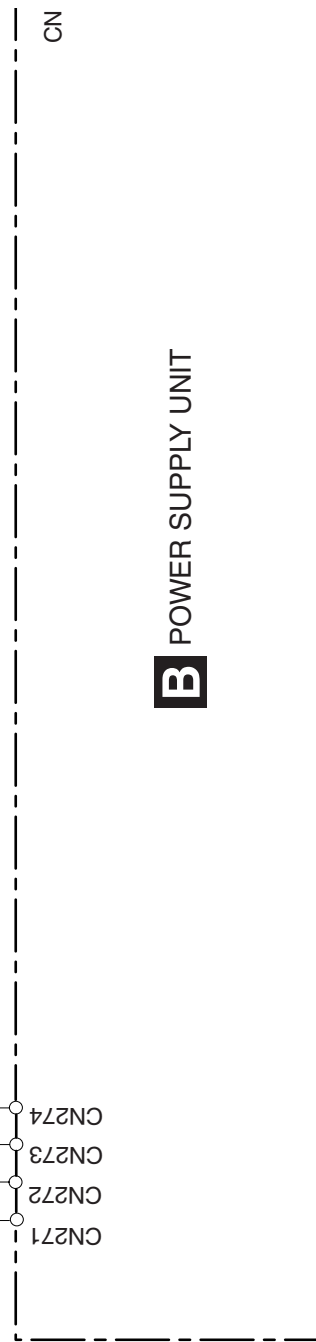






VOLTAGE NAME	OUTPUT LEVEL
+VH	+122V
-VH	-117V
+VL	+33V
-VL	-33V

## B POWER SUPPLY UNIT



F



**B-b**

A

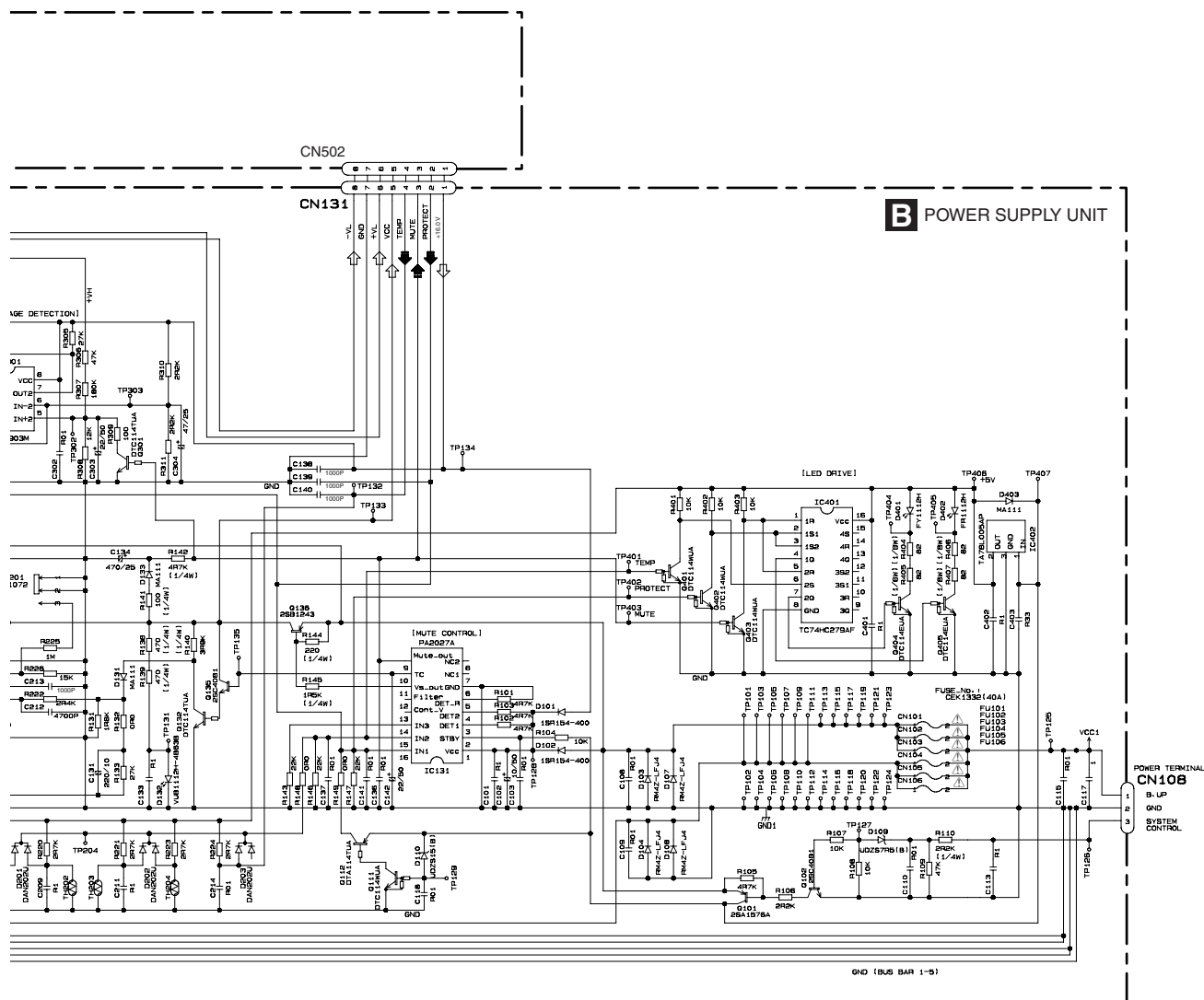
B

C

D

E

F



A

B

C

D

E

F

B-a B-b

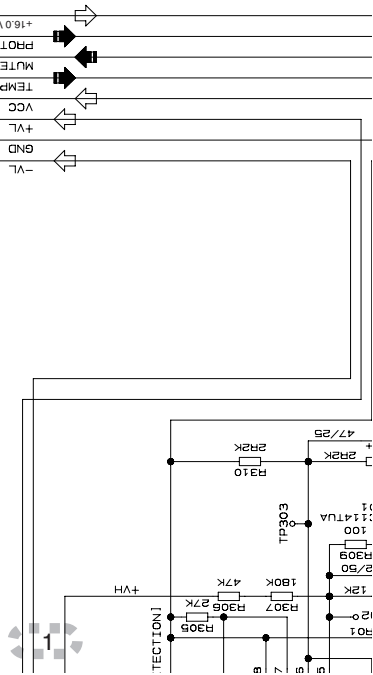
B-b

POWER SUPPLY UNIT

CN502

CN131

PRS-D2000SPL/XU/UC



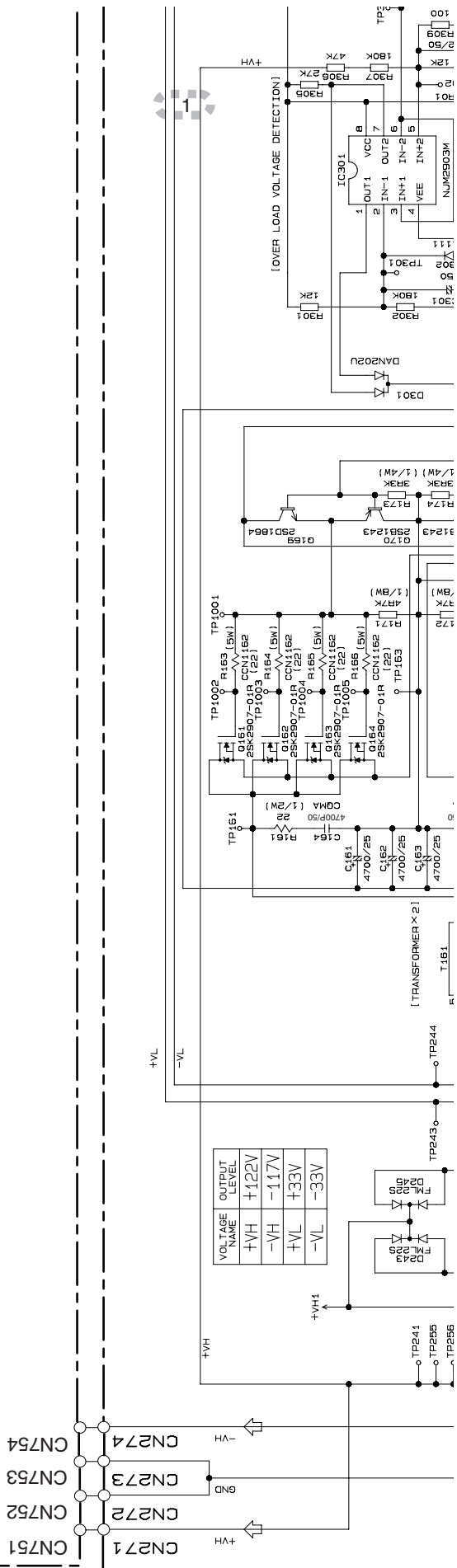


F

B-a B-b

# B-a

**A** AMP UNIT





F

B-a	B-b
-----	-----

**B-a**

## 4

**B**

**C**



F

PRS-D2000SPL/XU/UC



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C

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D

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E

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F

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PRS-D2000SPL/XU/UC

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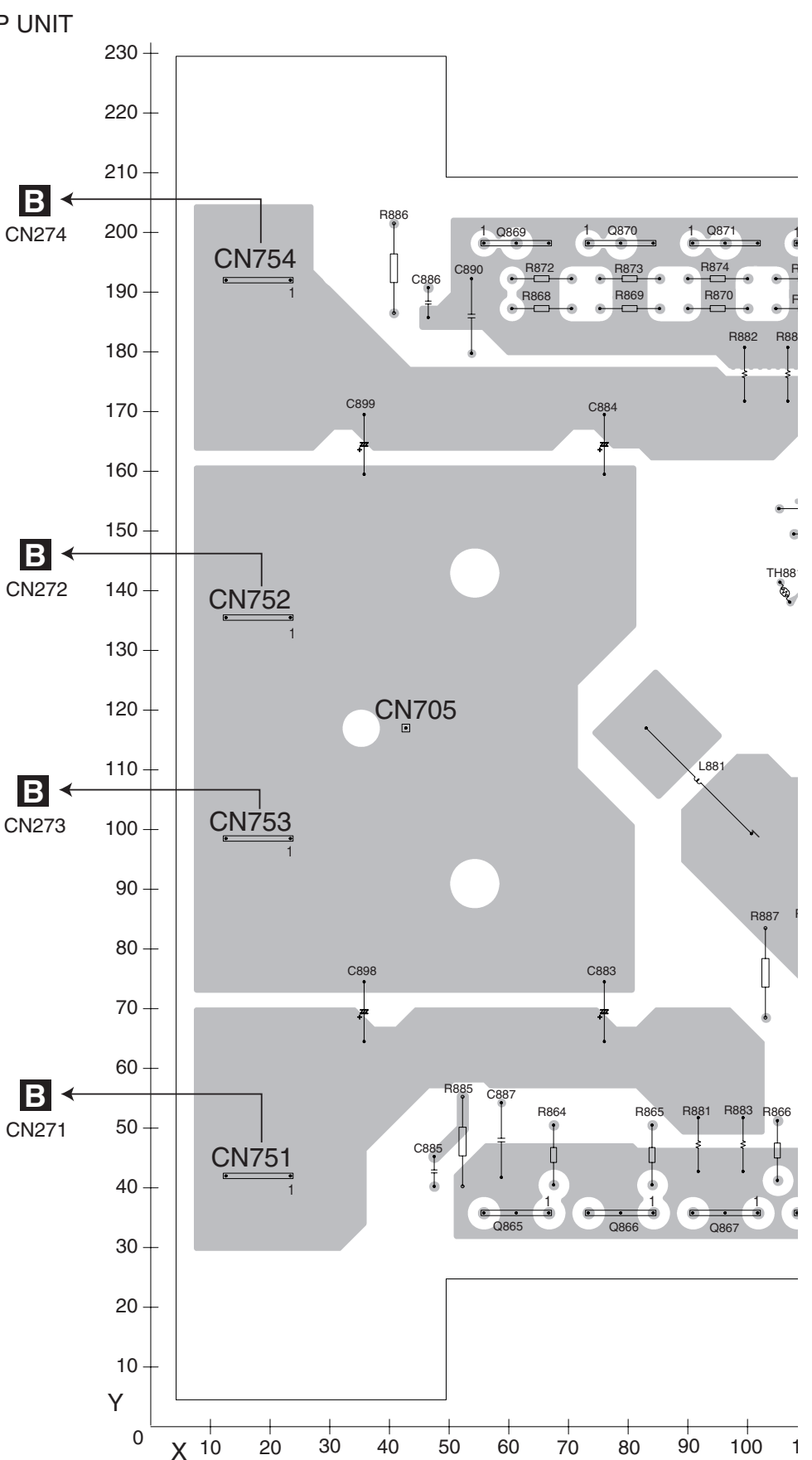
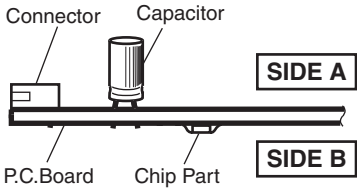
# 11. PCB CONNECTION DIAGRAM

## 11.1 AMP UNIT

### NOTE FOR PCB DIAGRAMS

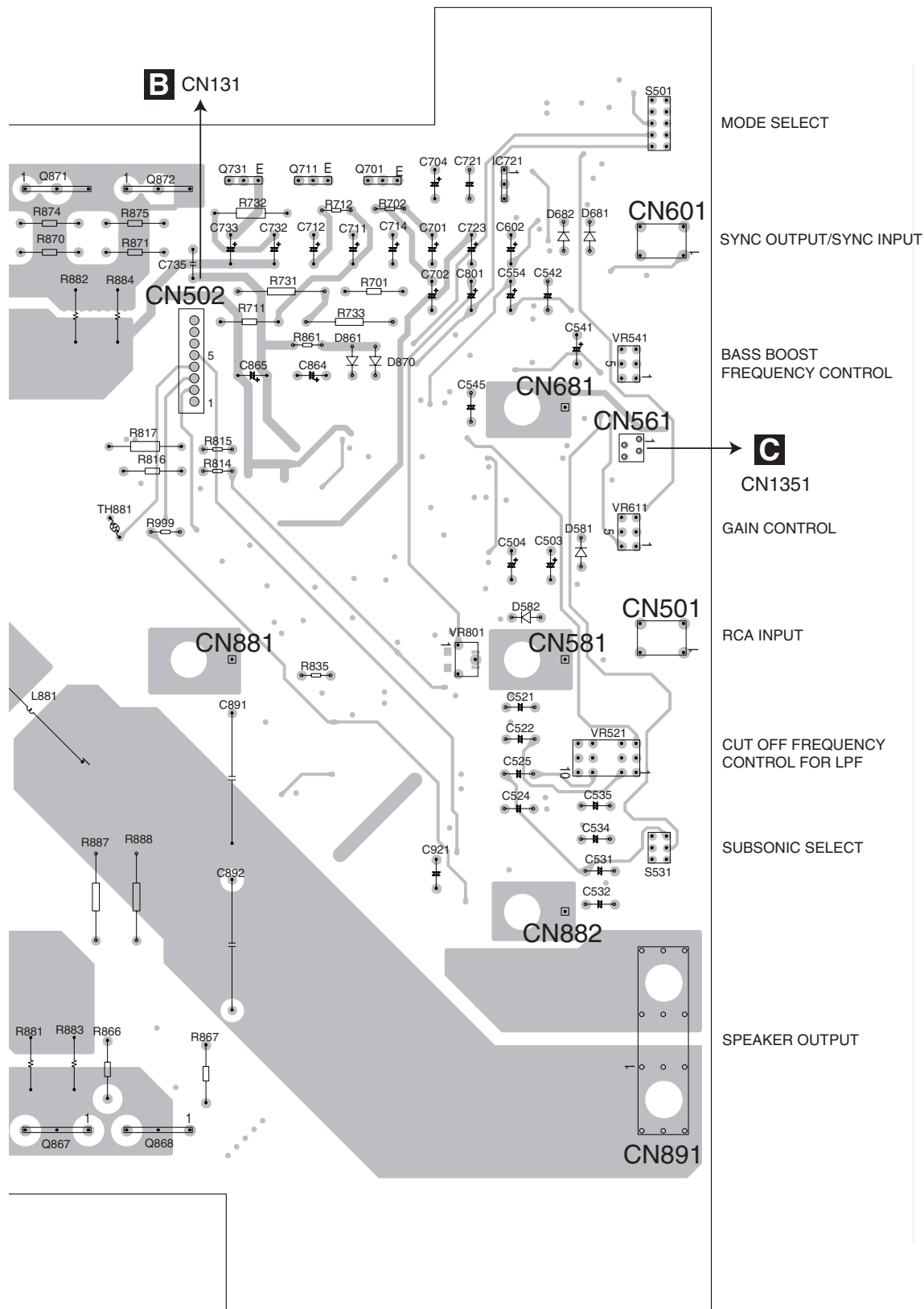
1.The parts mounted on this PCB include all necessary parts for several destination.  
For further information for respective destinations, be sure to check with the schematic diagram.

2.Viewpoint of PCB diagrams



SIDE A

A



B

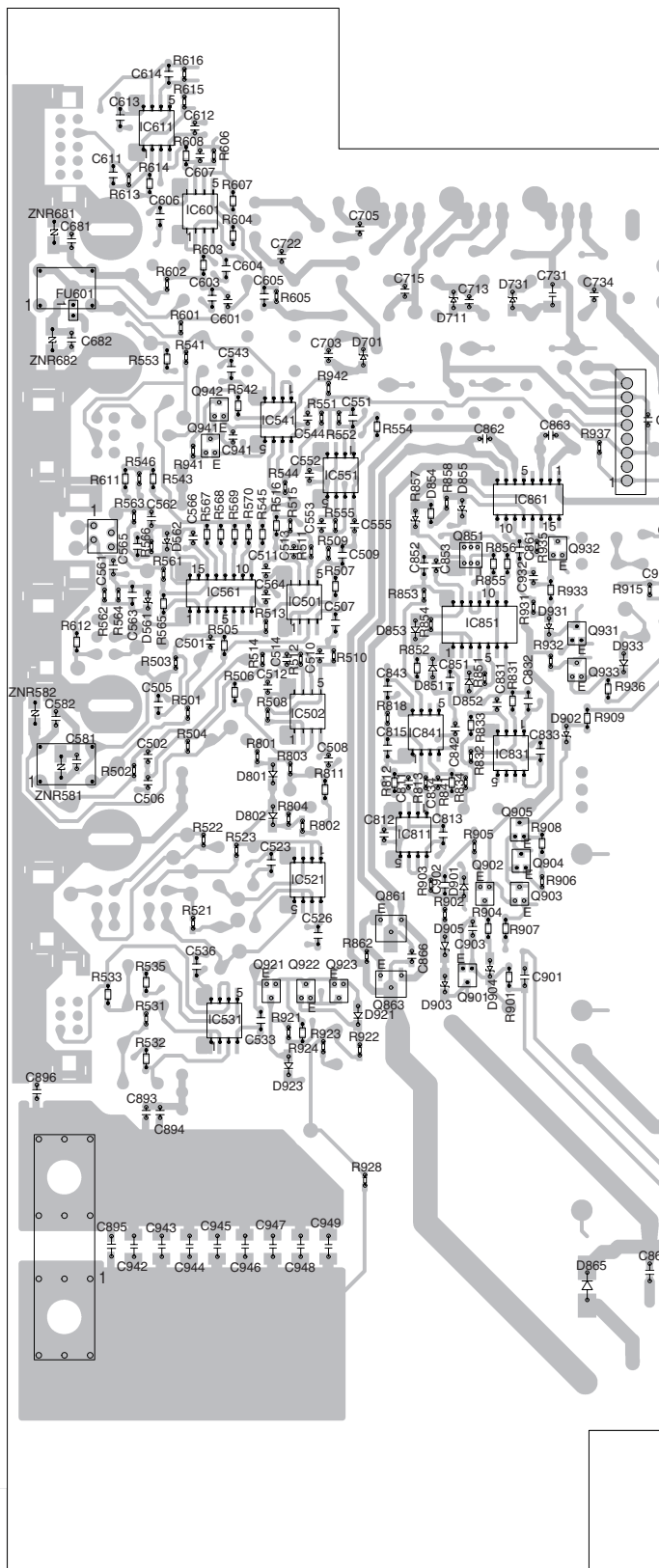
C

D

E

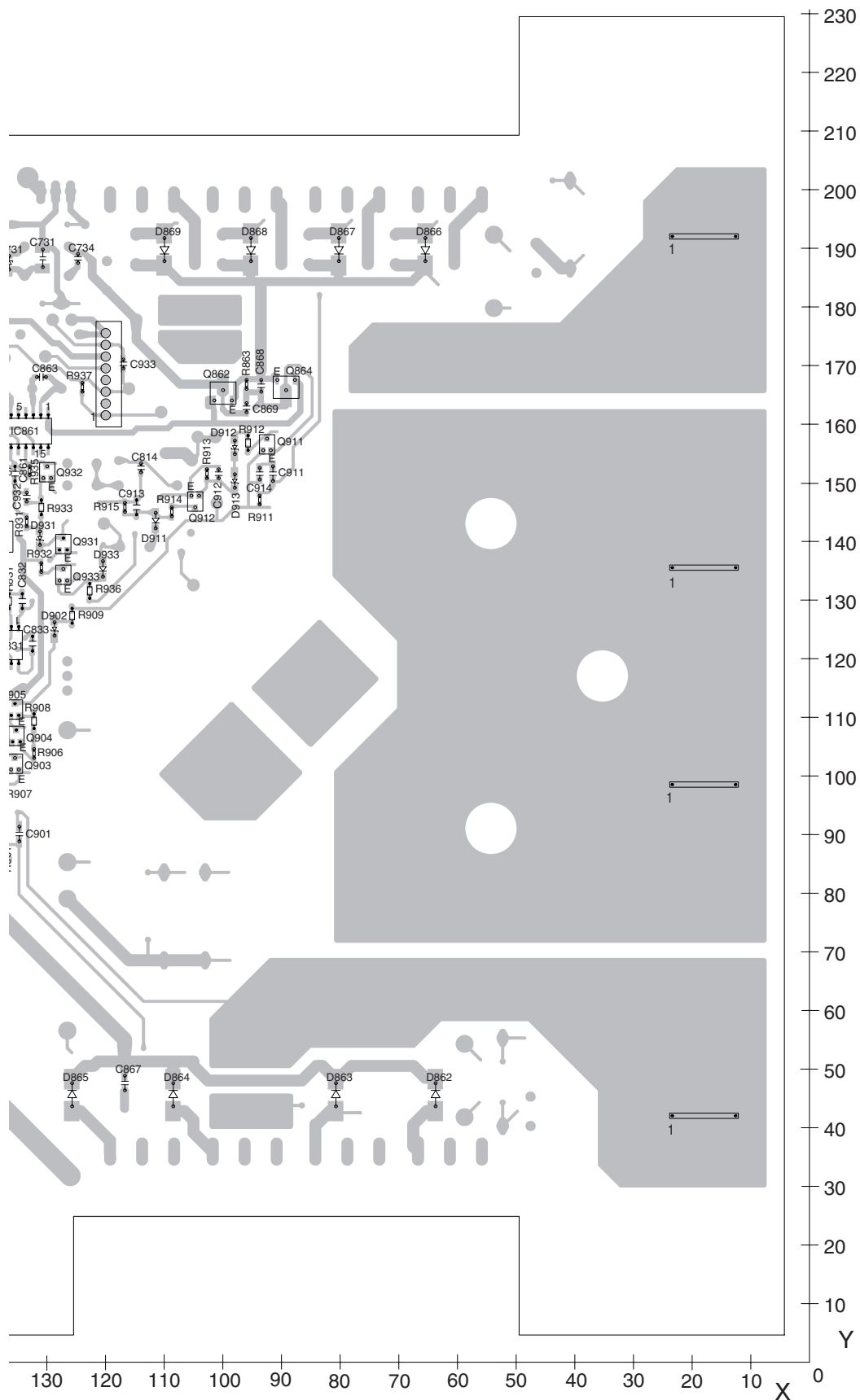
F

**A**



210 200 190 180 170 160 150 140 130 120

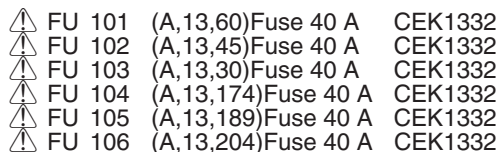
SIDE B



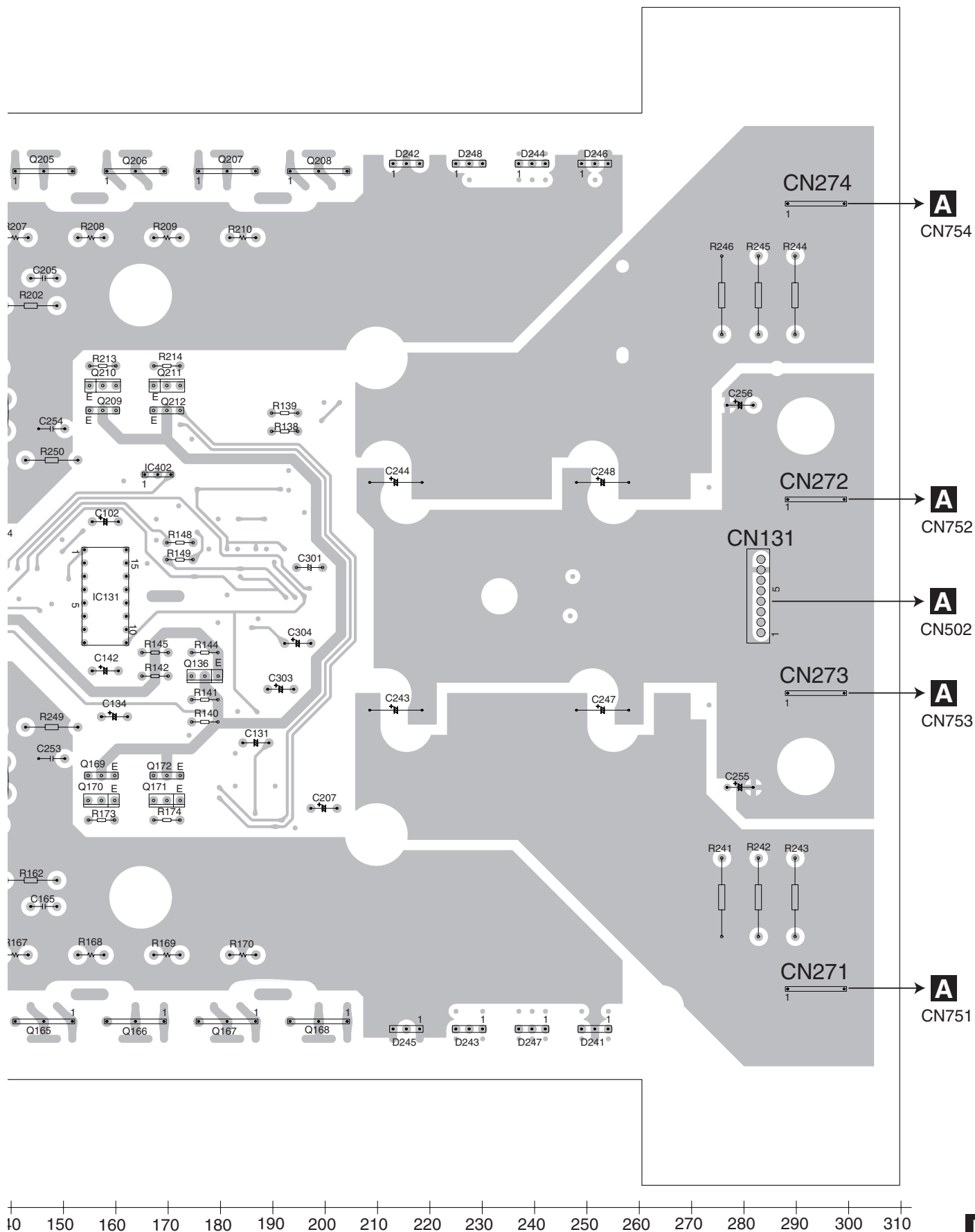
PRS-D2000SPL/XU/UC

## 4

## F



SIDE A



**B** POWER SUPPLY UNIT

A

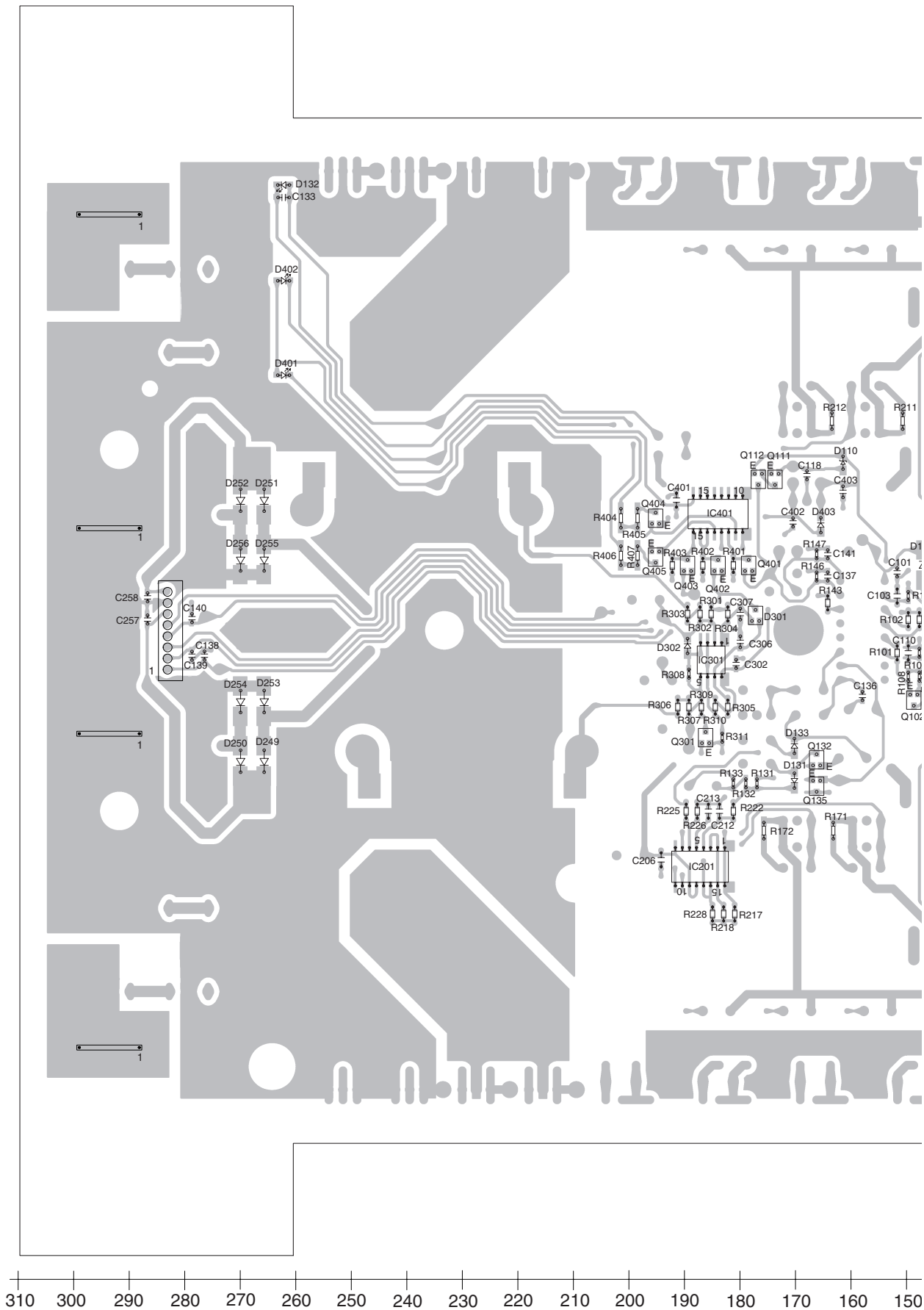
B

C

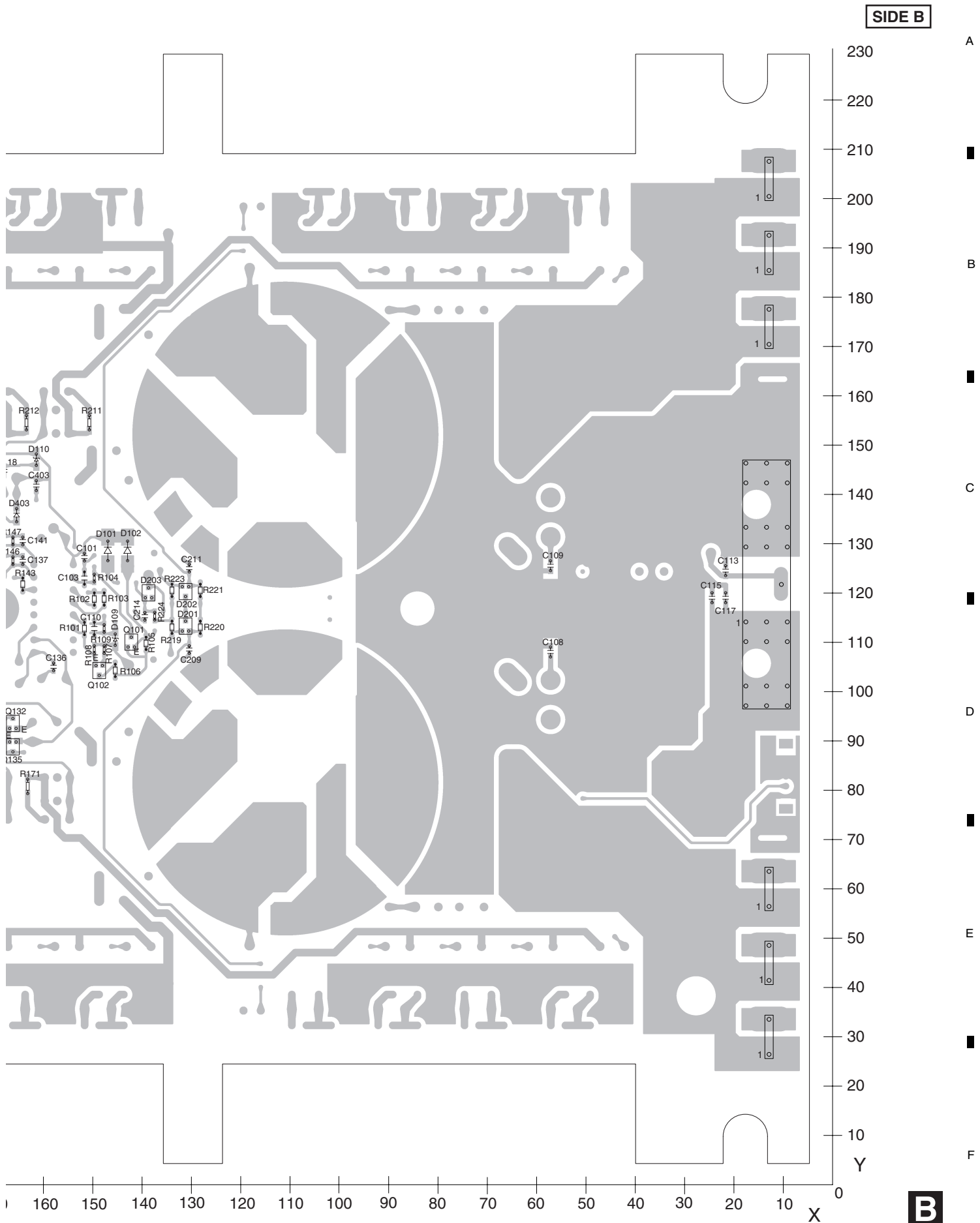
D

E

F

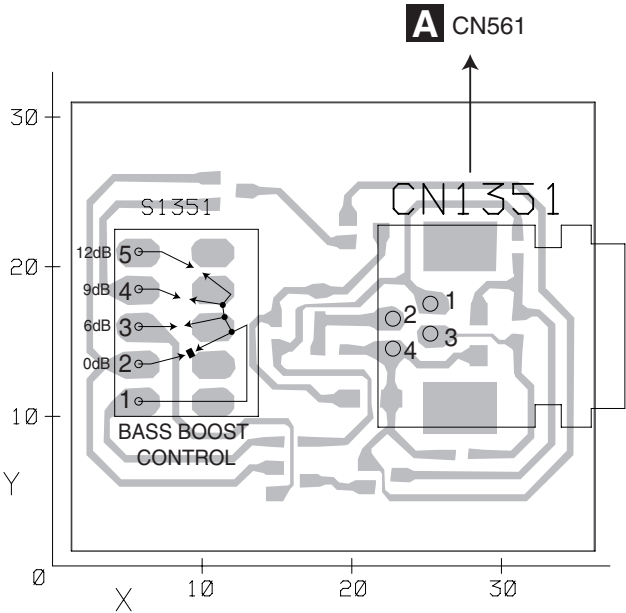




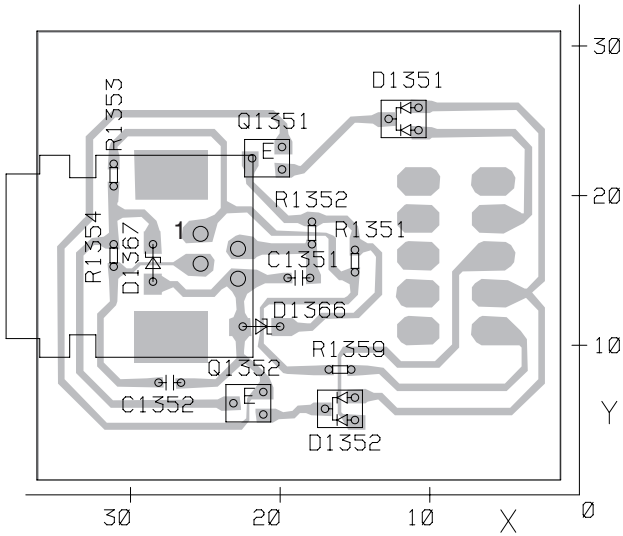


11.3 REMOTE CONTROL UNIT

C REMOTE CONTROL UNIT SIDE A



C REMOTE CONTROL UNIT SIDE B



# 12. ELECTRICAL PARTS LIST

## NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

### Chip Resistor

RS1/○○○○○J,RS1/○○○○○J

### Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Meaning of the figures and others in the parentheses in the parts list.

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

<u>Circuit Symbol and No.</u>	<u>Part No.</u>
<b>Unit Number : CWH1347</b>	
<b>Unit Name : Amp Unit</b>	
<b>Unit Number : CWR1084</b>	
<b>Unit Name : Power Supply Unit</b>	
<b>Unit Number : CWM9848</b>	
<b>Unit Name : Remote Control Unit</b>	

**A**

**Unit Number : CWH1347**  
**Unit Name : Amp Unit**

## MISCELLANEOUS

IC 501	(B,167,144) IC	NJM2068MD
IC 502	(B,166,128) IC	NJM2068MD
IC 521	(B,166,104) IC	NJM4558MD
IC 531	(B,178,84) IC	NJM4558MD
IC 541	(B,170,170) IC	NJM4558MD
IC 551	(B,161,162) IC	NJM4558MD
IC 561	(B,179,145) IC	MAX309ESE
IC 601	(B,182,200) IC	NJM2068MD
IC 611	(B,188,212) IC	NJM4558MD
IC 721	(A,174,199) IC	TA78L005AP
IC 811	(B,151,111) IC	NJM4558MD
IC 831	(B,137,122) COMPARATOR IC	NJM311M
IC 841	(B,149,125) COMPARATOR IC	NJM311M
IC 851	(B,141,141) IC	TC74AC14F
IC 861	(B,134,159) IC	TND505MD
Q 701	(A,153,200) Transistor	2SD2395
Q 711	(A,141,200) Transistor	2SB1566
Q 731	(A,129,200) POWER TR	2SC5511
Q 851	(B,143,151) Transistor	IMT4
Q 861	(B,154,97) Transistor	2SC5565
Q 862	(B,100,166) Transistor	2SC5565
Q 863	(B,154,89) Transistor	2SA2012
Q 864	(B,89,166) Transistor	2SA2012
Q 865	(A,61,35) FET	2SK3777-01R

<u>Circuit Symbol and No.</u>	<u>Part No.</u>
Q 866	(A,79,35) FET 2SK3777-01R
Q 867	(A,96,35) FET 2SK3777-01R
Q 868	(A,114,35) FET 2SK3777-01R
Q 869	(A,61,199) FET 2SK3777-01R
Q 870	(A,79,199) FET 2SK3777-01R
Q 871	(A,96,199) FET 2SK3777-01R
Q 872	(A,114,199) FET 2SK3777-01R
Q 901	(B,143,90) Transistor 2SA1579
Q 902	(B,141,102) Transistor 2SC4102
Q 903	(B,136,102) Transistor 2SC4102
Q 904	(B,135,107) Transistor 2SA1579
Q 905	(B,136,111) Transistor 2SA1579
Q 911	(B,93,157) Transistor 2SC4102
Q 912	(B,105,147) Chip Transistor 2SA1576A
Q 921	(B,171,88) Transistor 2SC4081
Q 922	(B,166,88) Transistor 2SC4081
Q 923	(B,162,88) Chip Transistor 2SA1576A
Q 931	(B,127,140) Transistor 2SA1579
Q 932	(B,130,152) Transistor 2SC4081
Q 933	(B,127,134) Transistor DTC114WUA
Q 941	(B,180,167) Transistor 2SC4081
Q 942	(B,179,172) Chip Digital Transistor DTA124EUA
D 561	(B,189,144) Diode UDZS16(B)
D 562	(B,186,153) Diode UDZS16(B)
D 581	(A,187,136) Diode ERA15-02VH
D 582	(A,177,124) Diode ERA15-02VH
D 681	(A,188,190) Diode ERA15-02VH
D 682	(A,184,190) Diode ERA15-02VH
D 701	(B,158,179) Diode UDZS16(B)
D 711	(B,145,188) Diode UDZS16(B)
D 731	(B,137,188) Diode UDZS16(B)
D 801	(B,171,119) Diode MA111
D 802	(B,171,113) Diode MA111
D 851	(B,148,135) Diode MA111
D 852	(B,143,133) Diode MA111
D 853	(B,151,140) Diode MA111
D 854	(B,151,156) Diode UDZS36(B)
D 855	(B,144,158) Diode UDZS36(B)
D 861	(A,147,169) Diode AL01
D 862	(B,64,46) Diode RF101L2S
D 863	(B,81,46) Diode RF101L2S

	1		2	3		4
	<u>Circuit Symbol and No.</u>		<u>Part No.</u>	<u>Circuit Symbol and No.</u>		<u>Part No.</u>
A	D 864	(B,109,46) Diode	RF101L2S	R 544	(B,169,161)	RS1/16S182J
	D 865	(B,126,46) Diode	RF101L2S	R 545	(B,173,154)	RS1/16S101J
	D 866	(B,66,190) Diode	RF101L2S	R 546	(B,190,162)	RS1/16S182J
	D 867	(B,80,190) Diode	RF101L2S	R 551	(B,164,171)	RS1/16S472J
	D 868	(B,95,190) Diode	RF101L2S	R 552	(B,162,171)	RS1/16S472J
■	D 869	(B,110,190) Diode	RF101L2S	R 553	(B,186,179)	RS1/16S471J
	D 870	(A,151,169) Diode	AL01	R 554	(B,156,169)	RS1/16S472J
	D 901	(B,144,103) Diode	MA111	R 555	(B,162,155)	RS1/16S472J
	D 902	(B,129,125) Diode	UDZS36(B)	R 561	(B,187,148)	RS1/16S472J
	D 903	(B,146,89) Diode	UDZS36(B)	R 562	(B,195,145)	RS1/16S102J
B	D 904	(B,140,91) Diode	UDZS36(B)	R 563	(B,191,156)	RS1/16S102J
	D 905	(B,146,95) Diode	UDZS27(B)	R 564	(B,193,145)	RS1/16S473J
	D 911	(B,112,144) Diode	MA111	R 565	(B,187,144)	RS1/16S473J
	D 912	(B,98,156) Diode	UDZS36(B)	R 566	(B,189,152)	RS1/16S473J
	D 913	(B,98,150) Diode	UDZS16(B)	R 567	(B,181,154)	RS1/16S104J
■	D 921	(B,159,85) Diode	MA111	R 568	(B,179,154)	RS1/16S122J
	D 923	(B,169,77) Diode	MA111	R 569	(B,177,154)	RS1/16S471J
	D 931	(B,131,141) Diode	UDZS36(B)	R 570	(B,175,154)	RS1/16S101J
	D 933	(B,121,135) Diode	MA111	R 601	(B,184,184)	RS1/16S471J
	ZNR581	(B,202,120) Surge Protector	CSA30-201N	R 602	(B,186,190)	RS1/16S0R0J
C	ZNR582	(B,205,128) Surge Protector	CSA30-201N	R 603	(B,181,193)	RS1/16S223J
	ZNR681	(B,203,197) Surge Protector	CSA30-201N	R 604	(B,177,197) 10 kΩ	CCN1152
	ZNR682	(B,203,182) Surge Protector	CSA30-201N	R 605	(B,171,188) 10 kΩ	CCN1152
	L 881	(A,83,117) Choke Coil 75 μH	CTH1366	R 606	(B,180,208) 10 kΩ	CCN1152
	TH881	(A,106,140) Thermistor	CCX1064	R 607	(B,177,202) 10 kΩ	CCN1152
■	S 501	(A,200,210) Switch(MODE SELECT)	CSH1029	R 608	(B,184,208)	RS1/16S182J
	S 531	(A,200,85) Switch(SUBSONIC SELECT)	CSH1021	R 611	(B,192,162)	RS1/16S101J
	VR521	(A,196,100) Variable Resistor 20 kΩ(E)	CCS1266	R 612	(B,199,138)	RS1/16S101J
	VR541	(A,196,168) Volume 50 kΩ(C)	CCS1263	R 613	(B,192,205)	RS1/16S122J
	VR611	(A,196,139) Variable Resistor 10 kΩ(A)	CCS1265	R 614	(B,189,204)	RS1/16S222J
△	VR801	(A,166,117) Semi-fixed 100 kΩ(OB)	CCP1506	R 615	(B,184,216)	RS1/16S472J
	△FU601	(B,200,186) Fuse 3 A	CEK1286	R 616	(B,184,220)	RS1/16S472J
				R 701	(A,151,181)	RS1/2PMF100J
				R 702	(A,154,195)	RD1/4PU222J
				R 711	(A,130,175)	RS1/2PMF220J
<b><u>RESISTORS</u></b>						
D	R 501	(B,183,128)	RS1/16S471J	R 712	(A,145,195)	RD1/4PU222J
	R 502	(B,191,120)	RS1/16S471J	R 731	(A,135,181)	RS2PMF151J
	R 503	(B,185,135)	RS1/16S0R0J	R 732	(A,130,194)	RS1PMF333J
	R 504	(B,183,123)	RS1/16S0R0J	R 733	(A,147,175)	RS2PMF151J
	R 505	(B,178,138)	RS1/16S223J	R 801	(B,173,122)	RS1/16S223J
■	R 506	(B,177,131)	RS1/16S223J	R 802	(B,167,112)	RS1/16S223J
	R 507	(B,162,146) 10 kΩ	CCN1152	R 803	(B,169,120)	RS1/16S203J
	R 508	(B,172,128) 10 kΩ	CCN1152	R 804	(B,169,113)	RS1/16S153J
	R 509	(B,163,151) 10 kΩ	CCN1152	R 811	(B,164,117)	RS1/16S222J
	R 510	(B,162,136) 10 kΩ	CCN1152	R 812	(B,154,118)	RS1/16S105J
E	R 511	(B,166,151) 10 kΩ	CCN1152	R 813	(B,149,118)	RS1/16S102J
	R 512	(B,167,136) 10 kΩ	CCN1152	R 814	(A,124,150)	RD1/4PU222J
	R 513	(B,172,141) 10 kΩ	CCN1152	R 815	(A,124,153)	RD1/4PU102J
	R 514	(B,173,136) 10 kΩ	CCN1152	R 816	(A,113,150)	RS1/2PMF223J
	R 515	(B,169,155)	RS1/16S222J	R 817	(A,112,154)	RS1PMF333J
■	R 516	(B,171,155)	RS1/16S222J	R 831	(B,137,130)	RS1/16S562J
	R 521	(B,183,98)	RS1/16S222J	R 832	(B,143,122)	RS1/16S223J
	R 522	(B,181,110)	RS1/16S222J	R 833	(B,143,126)	RS1/16S273J
	R 523	(B,176,108)	RS1/16S222J	R 834	(B,143,118)	RS1/16S223J
	R 531	(B,189,84)	RS1/16S333J	R 835	(A,141,114)	RD1/4PU332J
F	R 532	(B,189,78)	RS1/16S393J	R 841	(B,145,118)	RS1/16S104J
	R 533	(B,195,88)	RS1/16S153J	R 851	(B,141,133)	RS1/16S182J
	R 535	(B,189,89)	RS1/16S104J	R 852	(B,150,135)	RS1/16S562J
	R 541	(B,184,179)	RS1/16S472J	R 853	(B,149,145)	RS1/16S102J
	R 542	(B,176,172)	RS1/16S331J	R 854	(B,148,141)	RS1/16S182J

5		6	7		8
<u>Circuit Symbol and No.</u>		<u>Part No.</u>	<u>Circuit Symbol and No.</u>		<u>Part No.</u>
R 855	(B,139,150)	RS1/16S332J	C 502	(B,189,122)	CCSRCH471J50
R 856	(B,137,150)	RS1/16S332J	C 503	(A,182,133)	CEHAT100M50
R 857	(B,148,157)	RS1/16S113J	C 504	(A,175,133)	CEHAT100M50
R 858	(B,146,158)	RS1/16S113J	C 505	(B,188,129)	CKSRYB223K50
R 861	(A,140,171)	RD1/4PU0R0J			
			C 506	(B,189,118)	CKSRYB223K50
R 862	(B,158,93)	RS1/16S104J	C 507	(B,162,141)	CKSRYB103K50
R 863	(B,96,167)	RS1/16S104J	C 508	(B,163,121)	CKSRYB103K50
R 864	(A,68,46)	RS1/2PMF470J	C 509	(B,161,151)	CCSRCH271J50
R 865	(A,84,46)	RS1/2PMF470J	C 510	(B,164,136)	CCSRCH271J50
R 866	(A,105,46)	RS1/2PMF470J			
			C 511	(B,172,149)	CKSRYB103K50
R 867	(A,122,46)	RS1/2PMF470J	C 512	(B,172,132)	CKSRYB103K50
R 868	(A,66,187)	RS1/2PMF470J	C 513	(B,168,151)	CCSRCH271J50
R 869	(A,80,187)	RS1/2PMF470J	C 514	(B,169,136)	CCSRCH271J50
R 870	(A,95,187)	RS1/2PMF470J	C 521	(A,176,109)	CFTNA154J50
R 871	(A,110,187)	RS1/2PMF470J			
			C 522	(A,176,103)	CFTNA154J50
R 872	(A,66,192)	RS1/2PMF150J	C 523	(B,171,107)	CKSRYB103K50
R 873	(A,80,192)	RS1/2PMF150J	C 524	(A,176,91)	CFTNA154J50
R 874	(A,95,192)	RS1/2PMF150J	C 525	(A,176,97)	CFTNA474J50
R 875	(A,110,192)	RS1/2PMF150J	C 526	(B,165,96)	CKSRYB103K50
R 881	(A,92,47) 0.01 Ω	CCN1158			
			C 531	(A,190,81)	CFTNA224J50
R 882	(A,100,176) 0.01 Ω	CCN1158	C 532	(A,190,75)	CFTNA224J50
R 883	(A,99,47) 0.01 Ω	CCN1158	C 533	(B,173,84)	CKSRYB103K50
R 884	(A,107,176) 0.01 Ω	CCN1158	C 534	(A,189,86)	CFTNA224J50
R 885	(A,52,48)	RS2PMF100J	C 535	(A,189,92)	CFTNA224J50
R 886	(A,41,194)	RS2PMF100J			
			C 536	(B,182,92)	CKSRYB103K50
R 887	(A,103,76)	RS2PMF100J	C 541	(A,186,171)	CEHAT4R7M50
R 888	(A,110,76)	RS2PMF100J	C 542	(A,181,180)	CFTNA224J50
R 901	(B,137,90)	RS1/16S152J	C 543	(B,177,178)	CKSRYB103K50
R 902	(B,146,99)	RS1/16S222J	C 544	(B,166,171)	CKSRYB103K50
R 903	(B,148,103)	RS1/16S473J			
			C 545	(A,168,161)	CFTNA273J50
R 904	(B,140,97)	RS1/16S104J	C 551	(B,160,171)	CKSRYB272K50
R 905	(B,142,109)	RS1/16S473J	C 552	(B,166,162)	CKSRYB103K50
R 906	(B,132,104)	RS1/16S472J	C 553	(B,164,155)	CKSRYB272K50
R 907	(B,138,97)	RS1/16S473J	C 554	(A,175,180)	CEHAT100M50
R 908	(B,132,109)	RS1/16S472J			
			C 555	(B,159,155)	CKSRYB103K50
R 909	(B,126,127)	RS1/16S104J	C 561	(B,194,149)	CKSQYB102K50
R 911	(B,94,147)	RS1/16S102J	C 562	(B,189,156)	CKSQYB102K50
R 912	(B,96,157)	RS1/16S104J	C 563	(B,191,145)	CKSRYB473K50
R 913	(B,103,152)	RS1/16S472J	C 564	(B,172,145)	CKSRYB103K50
R 914	(B,109,145)	RS1/16S222J			
			C 565	(B,191,152)	CKSRYB473K50
R 915	(B,117,146)	RS1/16S103J	C 566	(B,183,153)	CKSRYB103K50
R 921	(B,169,82)	RS1/16S472J	C 581	(B,199,121)	CKSQYB102K50
R 922	(B,159,80)	RS1/16S472J	C 582	(B,202,127)	CKSQYB102K50
R 923	(B,164,80)	RS1/16S822J	C 601	(B,178,187)	CCSRCH471J50
R 924	(B,167,82)	RS1/16S472J			
			C 602	(A,175,188)	CEHAT100M50
R 928	(B,158,61)	RS1/16S473J	C 603	(B,180,188)	CKSRYB104K50
R 931	(B,134,143)	RS1/16S822J	C 604	(B,178,192)	CKSRYB103K50
R 932	(B,131,136)	RS1/16S332J	C 605	(B,172,188)	CCSRCH271J50
R 933	(B,131,146)	RS1/16S472J	C 606	(B,187,200)	CKSRYB103K50
R 935	(B,133,152)	RS1/16S103J			
			C 607	(B,182,208)	CCSRCH271J50
R 936	(B,123,132)	RS1/16S103J	C 611	(B,194,206)	CKSRYB272K50
R 937	(B,124,166)	RS1/16S103J	C 612	(B,182,212)	CKSRYB103K50
R 941	(B,183,166)	RS1/16S472J	C 613	(B,193,214)	CKSRYB103K50
R 942	(B,163,175)	RS1/16S102J	C 614	(B,186,220)	CKSRYB272K50
R 999	(A,115,139)	RD1/4PU103J			
			C 681	(B,200,196)	CKSQYB102K50
			C 682	(B,200,182)	CKSQYB102K50
			C 701	(A,161,188)	CEHAT100M50
			C 702	(A,161,180)	CEHAT470M25
			C 703	(B,163,180)	CKSRYB103K50
			C 704	(A,162,199)	CEHAT470M25
<b>CAPACITORS</b>					
C 501	(B,180,138)	CCSRCH471J50			

	1	2	3	4
	<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>
A	C 705 (B,159,198)	CKSRYB103K50	C 932 (B,134,148)	CKSRYB473K50
	C 711 (A,147,188)	CEHAT100M50	C 933 (B,117,170)	CKSRYB102K50
	C 712 (A,141,188)	CEHAT470M25	C 941 (B,177,168)	CKSRYB474K16
	C 713 (B,143,187)	CKSRYB103K50	C 942 (B,191,51) 0.22 $\mu$ F	ACG1125
	C 714 (A,154,188)	CEHAT470M25	C 943 (B,187,51) 0.22 $\mu$ F	ACG1125
	C 715 (B,152,189)	CKSRYB103K50	C 944 (B,183,51) 0.22 $\mu$ F	ACG1125
	C 721 (A,168,199)	CFTNA104J50	C 945 (B,179,51) 0.22 $\mu$ F	ACG1125
	C 722 (B,170,194)	CKSRYB104K50		
	C 723 (A,168,188)	CEHAT100M50		
	C 731 (B,131,188) 0.22 $\mu$ F	ACG1125		
B	C 732 (A,134,188)	CEHAT470M25		
	C 733 (A,126,188)	CEHAT470M25		
	C 734 (B,125,188)	CKSRYB473K50		
	C 735 (A,120,185)	CQMA103K2E		
	C 801 (A,168,180)	CEHAT220M50	IC 131 (A,158,117) IC	PA2027A
	C 811 (B,152,118)	CKSRYB222K50	IC 201 (B,187,74) IC	UPC494GS
	C 812 (B,155,111)	CKSRYB103K50	IC 301 (B,185,112) IC	NJM2903M
	C 813 (B,147,111)	CKSRYB103K50	IC 401 (B,184,138) IC	TC74HC279AF
	C 814 (B,114,153)	CKSRYB471K50	IC 402 (A,168,140) IC	TA78L005AP
	C 815 (B,155,123)	CKSRYB103K50	Q 101 (B,142,110) Chip Transistor	2SA1576A
C	C 831 (B,139,129)	CKSRYB471K50	Q 102 (B,149,104) Transistor	2SC4081
	C 832 (B,134,130)	CKSRYB103K50	Q 111 (B,174,144) Transistor	DTC114WUA
	C 833 (B,133,123)	CKSRYB103K50	Q 112 (B,177,144) Transistor	DTA114TUA
	C 834 (B,147,118)	CKSRYB471K50	Q 132 (B,166,94) Chip Transistor	DTC114TUA
	C 842 (B,145,126)	CKSRYB103K50	Q 135 (B,166,89) Transistor	2SC4081
	C 843 (B,155,132)	CKSRYB103K50	Q 136 (A,177,102) Transistor	2SB1243
	C 851 (B,146,133)	CKSRYB221K50	Q 161 (A,52,35) FET	2SK2907-01R
	C 852 (B,149,149)	CKSRYB104K50	Q 162 (A,69,35) FET	2SK2907-01R
	C 853 (B,148,149)	CKSRYB221K50	Q 163 (A,87,35) FET	2SK2907-01R
	C 861 (B,136,152)	CKSRYB104K50	Q 164 (A,104,35) FET	2SK2907-01R
D	C 862 (B,141,168)	CKSRYB104K50	Q 165 (A,146,35) FET	2SK2907-01R
	C 863 (B,131,168)	CKSRYB104K50	Q 166 (A,164,35) FET	2SK2907-01R
	C 864 (A,140,166)	CEHAT220M50	Q 167 (A,181,35) FET	2SK2907-01R
	C 865 (A,130,166)	CEHAT331M25	Q 168 (A,199,35) FET	2SK2907-01R
	C 866 (B,151,93)	CKSRYB474K16	Q 169 (A,157,83) Transistor	2SD1864
	C 867 (B,117,48)	CKSQYB472K50	Q 170 (A,157,78) Transistor	2SB1243
	C 868 (B,94,167)	CKSQYB472K50	Q 171 (A,170,78) Transistor	2SB1243
	C 869 (B,96,163)	CKSRYB474K16	Q 172 (A,170,83) Transistor	2SD1864
	C 883 (A,76,70) 2 200 $\mu$ F/160 V	CCH1741	Q 201 (A,52,199) FET	2SK2907-01R
	C 884 (A,76,165) 2 200 $\mu$ F/160 V	CCH1741	Q 202 (A,69,199) FET	2SK2907-01R
E	C 885 (A,48,43)	CQMA102K2E	Q 203 (A,87,199) FET	2SK2907-01R
	C 886 (A,47,188)	CQMA102K2E	Q 204 (A,104,199) FET	2SK2907-01R
	C 887 (A,59,48) 1 $\mu$ F	CCE1035	Q 205 (A,146,199) FET	2SK2907-01R
	C 890 (A,54,186) 1 $\mu$ F	CCE1035	Q 206 (A,164,199) FET	2SK2907-01R
	C 891 (A,127,97) 10 $\mu$ F	CCE1038	Q 207 (A,181,199) FET	2SK2907-01R
	C 892 (A,127,68) 10 $\mu$ F	CCE1038	Q 208 (A,199,199) FET	2SK2907-01R
	C 893 (B,189,71)	CKSRYB102K50	Q 209 (A,158,152) Transistor	2SD1864
	C 894 (B,187,71)	CKSRYB103K50	Q 210 (A,158,157) Transistor	2SB1243
	C 895 (B,194,51) 2 200 pF	CCG1248	Q 211 (A,170,157) Transistor	2SB1243
	C 896 (B,205,74)	CKSQYB102K50	Q 212 (A,170,152) Transistor	2SD1864
F	C 898 (A,36,70) 2 200 $\mu$ F/160 V	CCH1741	Q 301 (B,186,98) Chip Transistor	DTC114TUA
	C 899 (A,36,165) 2 200 $\mu$ F/160 V	CCH1741	Q 401 (B,179,129) Transistor	DTC114WUA
	C 901 (B,135,90)	CKSQYB224K50	Q 402 (B,184,129) Transistor	DTC114WUA
	C 902 (B,146,103)	CKSRYB103K50	Q 403 (B,190,129) Transistor	DTC114WUA
	C 903 (B,142,97)	CKSQYB103K50	Q 404 (B,195,137) Chip Transistor	DTC114EUA
	C 911 (B,92,152)	CKSQYB224K50	Q 405 (B,195,130) Chip Transistor	DTC114EUA
	C 912 (B,101,152)	CKSRYB104K50	D 101 (B,147,129) Diode	1SR154-400
	C 913 (B,115,146)	CKSRYB104K50	D 102 (B,143,129) Diode	1SR154-400
	C 914 (B,94,152)	CKSQYB103K50	D 103 (A,47,94) Diode	RM4Z-LFJ4
	C 921 (A,162,80)	CEHANP221M10	D 104 (A,47,139) Diode	RM4Z-LFJ4

**B**

**Unit Number : CWR1084**

**Unit Name : Power Supply Unit**

### MISCELLANEOUS

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
D 107	(A,47,102) Diode	RM4Z-LFJ4		R 139	(A,192,152)	RD1/4PU471J	
D 108	(A,47,131) Diode	RM4Z-LFJ4		R 140	(A,177,93)	RD1/4PU392J	
D 109	(B,146,111) Diode	UDZS7R5(B)		R 141	(A,177,97)	RD1/4PU101J	A
D 110	(B,162,147) Diode	UDZS15(B)		R 142	(A,168,102)	RD1/4PU472J	
				R 143	(B,164,122)	RS1/16S223J	
D 131	(B,170,90) Diode	MA111		R 144	(A,177,106)	RD1/4PU221J	
D 132	(B,262,197) LED	VUB1112H-4B63B					
D 133	(B,170,96) Diode	MA111		R 145	(A,168,106)	RD1/4PU152J	
D 201	(B,131,113) Diode	DAN202U		R 146	(B,166,127)	RS1/16S223J	
D 202	(B,131,120) Diode	DAN202U		R 147	(B,166,131)	RS1/16S223J	
				R 148	(A,172,127)	RD1/4PU0R0J	
D 203	(B,139,120) Diode	DAN202U		R 149	(A,172,124)	RD1/4PU0R0J	
D 241	(A,252,34) Diode	FML22S					
D 242	(A,216,199) Diode	FML22S		R 161	(A,85,56)	RS1/2PMF220J	
D 243	(A,228,34) Diode	FML22S		R 162	(A,144,63)	RS1/2PMF220J	
D 244	(A,240,199) Diode	FML22S		R 163	(A,45,48) 22 Ω	CCN1162	B
				R 164	(A,59,48) 22 Ω	CCN1162	
D 245	(A,216,34) Diode	FML22S		R 165	(A,74,48) 22 Ω	CCN1162	
D 246	(A,252,199) Diode	FML22S					
D 247	(A,240,34) Diode	FML22S		R 166	(A,88,48) 22 Ω	CCN1162	
D 248	(A,228,199) Diode	FML22S		R 167	(A,141,48) 22 Ω	CCN1162	
D 249	(B,266,93) Diode	1SR154-400		R 168	(A,155,48) 22 Ω	CCN1162	
				R 169	(A,170,48) 22 Ω	CCN1162	
D 250	(B,270,93) Diode	1SR154-400		R 170	(A,184,48) 22 Ω	CCN1162	
D 251	(B,266,140) Diode	1SR154-400					
D 252	(B,270,140) Diode	1SR154-400		R 171	(B,163,81)	RS1/8S472J	
D 253	(B,266,104) Diode	1SR154-400		R 172	(B,176,81)	RS1/8S472J	
D 254	(B,270,104) Diode	1SR154-400		R 173	(A,157,74)	RD1/4PU332J	
				R 174	(A,170,74)	RD1/4PU332J	C
D 255	(B,266,130) Diode	1SR154-400		R 201	(A,85,177)	RS1/2PMF220J	
D 256	(B,270,130) Diode	1SR154-400					
D 301	(B,177,120) Diode	DAN202U		R 202	(A,144,172)	RS1/2PMF220J	
D 302	(B,190,114) Diode	MA111		R 203	(A,45,185) 22 Ω	CCN1162	
D 401	(B,262,163) LED	FY1112H		R 204	(A,59,185) 22 Ω	CCN1162	
				R 205	(A,74,185) 22 Ω	CCN1162	
D 402	(B,262,180) LED	FR1112H		R 206	(A,88,185) 22 Ω	CCN1162	
D 403	(B,166,136) Diode	MA111					
T 161	(A,111,82) Transformer	CTT1138		R 207	(A,141,185) 22 Ω	CCN1162	
T 201	(A,111,152) Transformer	CTT1138		R 208	(A,155,185) 22 Ω	CCN1162	
TH201	(A,136,107) Thermistor	CCX1064		R 209	(A,170,185) 22 Ω	CCN1162	
				R 210	(A,184,185) 22 Ω	CCN1162	
TH202	(A,118,36) Thermistor	CCX1013		R 211	(B,151,155)	RS1/8S472J	D
TH203	(A,118,198) Thermistor	CCX1013					
TH204	(A,137,126) Thermistor	CCX1064		R 212	(B,164,155)	RS1/8S472J	
S 201	(A,10,83) Slide Switch(BFC)	CSH1072		R 213	(A,158,161)	RD1/4PU332J	
△FU101	(A,13,60)Fuse 40 A	CEK1332		R 214	(A,170,161)	RD1/4PU332J	
				R 217	(B,181,66)	RS1/16S472J	
△FU102	(A,13,45)Fuse 40 A	CEK1332		R 218	(B,183,66)	RS1/16S472J	
△FU103	(A,13,30)Fuse 40 A	CEK1332					
△FU104	(A,13,174)Fuse 40 A	CEK1332		R 219	(B,134,113)	RS1/16S272J	
△FU105	(A,13,189)Fuse 40 A	CEK1332		R 220	(B,128,113)	RS1/16S272J	
△FU106	(A,13,204)Fuse 40 A	CEK1332		R 221	(B,128,121)	RS1/16S272J	
				R 222	(B,181,84)	RS1/16S242J	
				R 223	(B,134,121)	RS1/16S272J	
<b>RESISTORS</b>							
R 101	(B,152,113)	RS1/16S472J		R 224	(B,138,115)	RS1/16S272J	E
R 102	(B,150,119)	RS1/16S472J		R 225	(B,190,84)	RS1/16S105J	
R 103	(B,148,119)	RS1/16S472J		R 226	(B,188,84)	RS1/16S153J	
R 104	(B,150,123)	RS1/16S103J		R 228	(B,185,66)	RS1/16S472J	
R 105	(B,139,110)	RS1/16S472J		R 241	(A,276,59)	RS2PMF332J	
R 106	(B,146,104)	RS1/16S222J		R 242	(A,283,59)	RS2PMF332J	
R 107	(B,148,109)	RS1/16S103J		R 243	(A,290,59)	RS2PMF332J	
R 108	(B,150,109)	RS1/16S103J		R 244	(A,290,174)	RS2PMF332J	
R 109	(B,148,113)	RS1/16S473J		R 245	(A,283,174)	RS2PMF332J	
R 110	(A,37,124)	RD1/4PU222J		R 246	(A,276,174)	RS2PMF332J	
R 131	(B,177,89)	RS1/16S182J		R 249	(A,148,92)	RS1/2PMF220J	F
R 132	(B,179,89)	RS1/16S0R0J		R 250	(A,148,143)	RS1/2PMF220J	
R 133	(B,181,89)	RS1/16S273J		R 301	(B,185,120)	RS1/16S120F	
R 138	(A,192,148)	RD1/4PU471J		R 302	(B,187,120)	RS1/16S1803F	

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**Circuit Symbol and No.****Part No.****Circuit Symbol and No.****Part No.**

R 303	(B,190,120)	RS1/16S6802F
R 305	(B,182,103)	RS1/16S273J
R 306	(B,191,103)	RS1/16S4702F
R 307	(B,189,103)	RS1/16S1803F
R 308	(B,189,109)	RS1/16S1202F
R 309	(B,187,103)	RS1/16S101J
R 310	(B,185,103)	RS1/16S2201F
R 311	(B,183,98)	RS1/16S2201F
R 401	(B,181,129)	RS1/16S103J
R 402	(B,187,129)	RS1/16S103J
R 403	(B,192,129)	RS1/16S103J
R 404	(B,202,137)	RS1/8S820J
R 405	(B,199,137)	RS1/8S820J
R 406	(B,202,130)	RS1/8S820J
R 407	(B,199,130)	RS1/8S820J

**CAPACITORS**

C 101	(B,152,127)	CKSRYB104K50
C 102	(A,158,131)	CEHAT100M50
C 103	(B,152,123)	CKSRYB103K50
C 108	(B,57,108)	CKSQYB103K50
C 109	(B,57,126)	CKSQYB103K50
C 110	(B,150,113)	CKSRYB103K50
C 113	(B,22,125)	CKSQYB104K50
C 115	(B,25,119)	CKSQYB103K50
C 117	(B,22,119)	CKSQYB105K25
C 118	(B,168,145)	CKSRYB103K50
C 131	(A,187,89)	CEHANP221M10
C 133	(B,262,195)	CKSQYB104K50
C 134	(A,160,94)	CEHAT471M25
C 136	(B,158,105)	CKSRYB103K50
C 137	(B,164,127)	CKSRYB103K50
C 138	(B,277,112)	CKSRYB102K50
C 139	(B,279,112)	CKSRYB102K50
C 140	(B,279,119)	CKSRYB102K50
C 141	(B,164,131)	CKSRYB103K50
C 142	(A,158,103)	CEHAT220M50
C 161	(A,70,69) 4 700 $\mu$ F/25 V	CCH1738(P45)
C 162	(A,70,104) 4 700 $\mu$ F/25 V	CCH1738(P45)
C 163	(A,70,87) 4 700 $\mu$ F/25 V	CCH1738(P45)
C 164	(A,73,56)	CQMA472J50
C 165	(A,146,58)	CQMA472J50
C 201	(A,70,165) 4 700 $\mu$ F/25 V	CCH1738(P45)
C 202	(A,70,147) 4 700 $\mu$ F/25 V	CCH1738(P45)
C 203	(A,70,130) 4 700 $\mu$ F/25 V	CCH1738(P45)
C 204	(A,73,177)	CQMA472J50
C 205	(A,146,178)	CQMA472J50
C 206	(B,194,76)	CKSRYB223K50
C 207	(A,200,76)	CEHAT221M25
C 209	(B,131,109)	CKSRYB104K50
C 211	(B,131,125)	CKSRYB104K50
C 212	(B,184,84)	CKSRYB472K50
C 213	(B,186,84)	CKSRYB102K50
C 214	(B,140,115)	CKSRYB103K50
C 243	(A,214,95) 2 200 $\mu$ F/160 V	CCH1741
C 244	(A,214,139) 2 200 $\mu$ F/160 V	CCH1741
C 247	(A,253,95) 2 200 $\mu$ F/160 V	CCH1741
C 248	(A,253,139) 2 200 $\mu$ F/160 V	CCH1741
C 253	(A,148,86)	CQMA102K2E

C 254	(A,148,149)	CQMA102K2E
C 255	(A,279,80)	CEHAT102M50(P35)
C 256	(A,279,153)	CEHAT102M50(P35)
C 257	(B,287,119)	CKSRYB104K50
C 258	(B,287,123)	CKSRYB104K50
C 301	(A,197,122)	CEHANP1R0M50
C 302	(B,181,111)	CKSRYB103K50
C 303	(A,192,99)	CEHAT220M50
C 304	(A,195,108)	CEHAT470M25
C 401	(B,192,140)	CKSRYB104K50
C 402	(B,171,136)	CKSRYB104K50
C 403	(B,162,142)	CKSQYB334K50

**Unit Number : CWM9848****Unit Name : Remote Control Unit****MISCELLANEOUS**

Q 1351	(B,21,23) Chip Transistor	DTC114EUA
Q 1352	(B,22,6) Chip Transistor	DTC114EUA
D 1351	(B,12,25) Diode	DAN202U
D 1352	(B,16,6) Diode	DAN202U
D 1366	(B,21,11) Diode	UDZS16(B)
D 1367	(B,29,16) Diode	UDZS16(B)
S 1351	(A,6,11) Switch(BASS BOOST)	CSD1128

**RESISTORS**

R 1351	(B,15,16)	RS1/16S103J
R 1352	(B,18,18)	RS1/16S102J
R 1353	(B,31,21)	RS1/16S103J
R 1354	(B,31,16)	RS1/16S102J
R 1359	(B,16,8)	RS1/16S102J